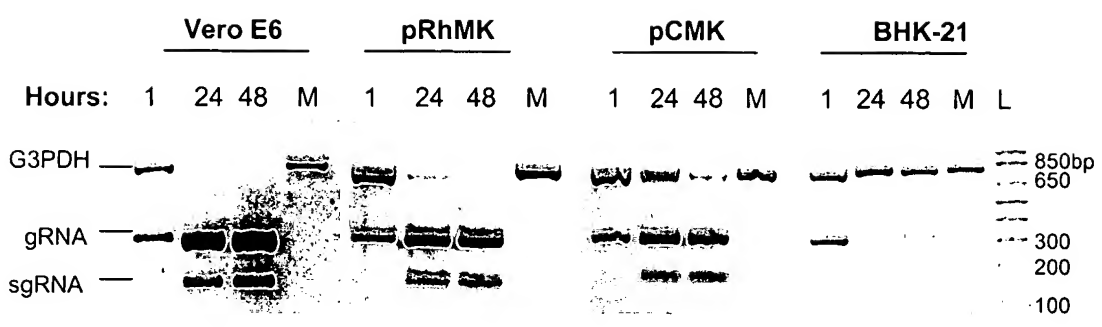


FIG. 1

A.



B.

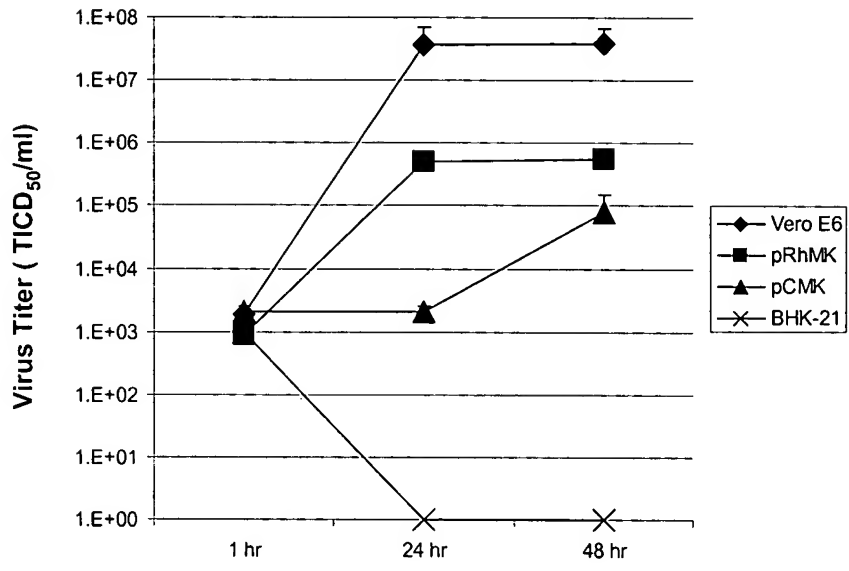


FIG. 2.

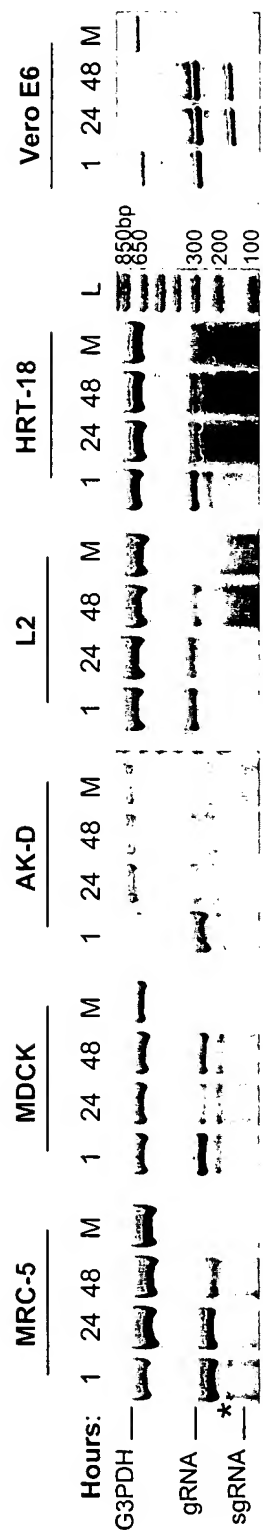
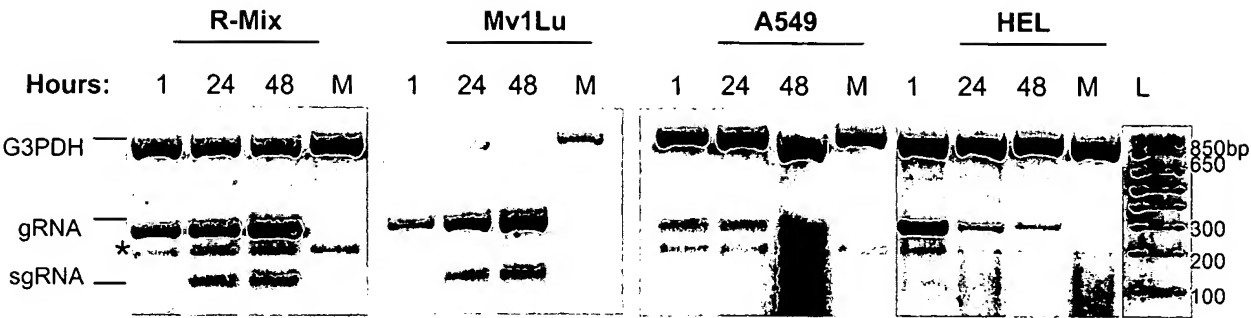


FIG. 3.

A.



B.

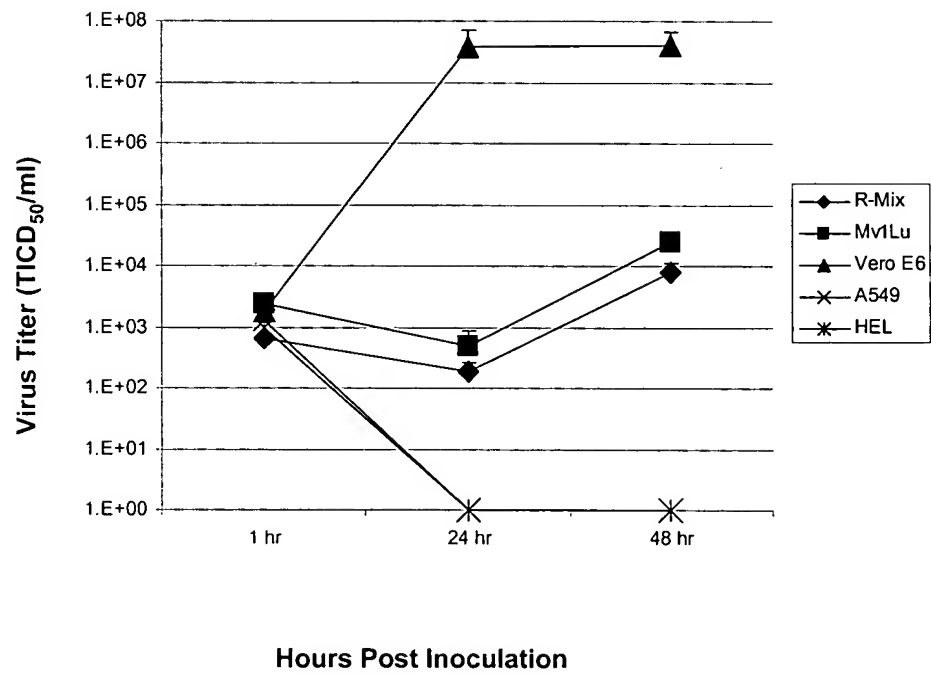
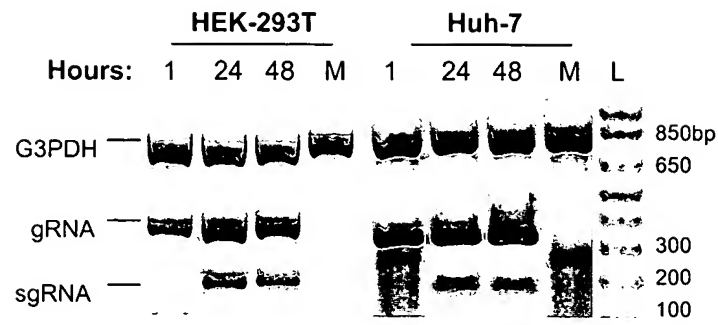


FIG. 4.

A.



B.

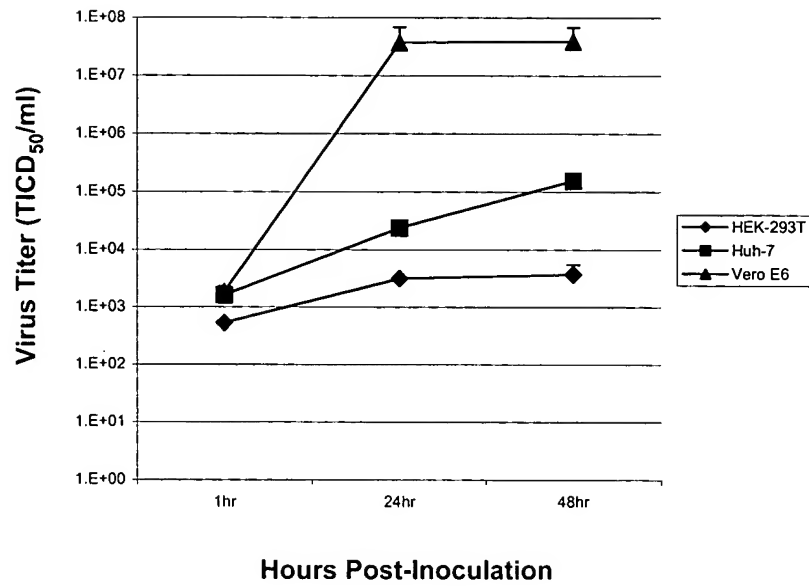
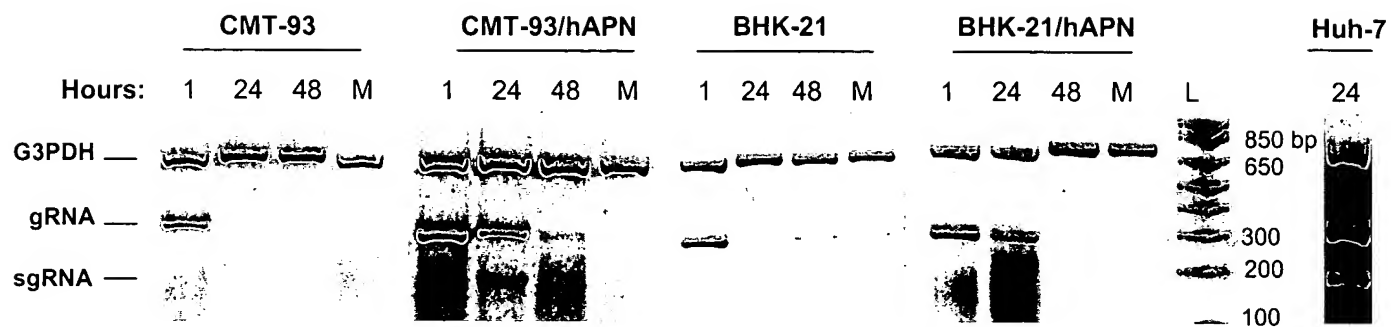


FIG. 5.

A.



B.

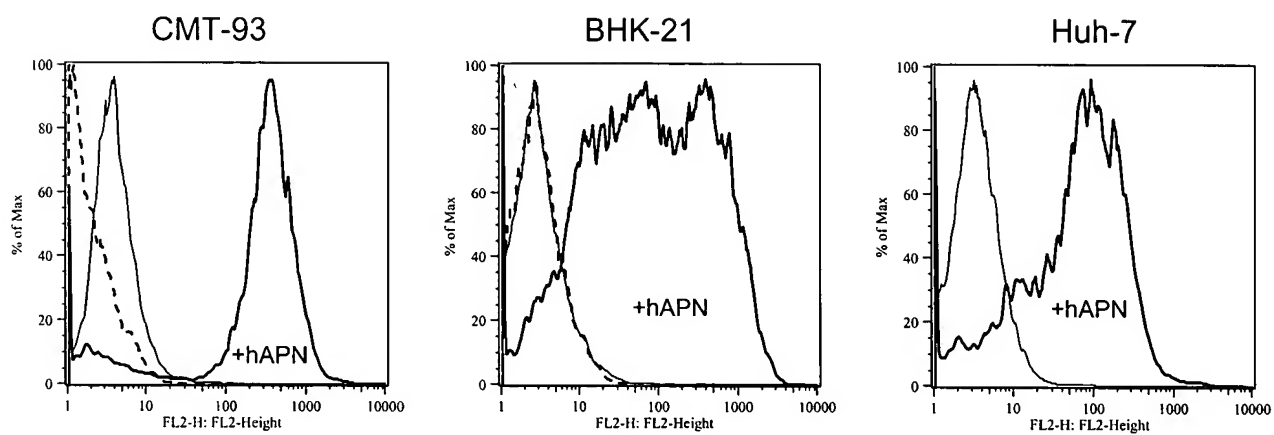


FIG. 6.

FIGURE 7A

1	atattaggtt	tttacctacc	caggaaaagc	caaccaacct	cgatctcttg	tagatctggt
61	ctctaaacga	acttttaaaat	ctgtgtagct	gtcgctcggc	tgcatgccta	gtgcacctac
121	gcagtataaa	caataataaa	ttttactgtc	gttgacaaga	aacgagtaac	tcgtccctct
181	tctgcagact	gcttacggtt	tcgtccgtgt	tgcatgcgat	catcagcata	cctaggtttc
241	gtccgggtgt	gaccgaaaagg	taagatggag	agccttggtc	ttggtgtcaa	cgagaaaaca
301	cacgtccaac	tcagtttgcc	tgtccttcag	gttagagacg	tgctagtgcg	tggtctcggg
361	gactctgtgg	aagaggccct	atcggaggca	cgtgaacacc	tcaaaaatgg	cacttgtggt
421	ctagtagagc	tggaaaaaagg	cgtactgccc	cagcttgaac	agccctatgt	gttcattaaa
481	cgttctgatg	ccttaagcac	caatcacggc	cacaaggctg	ttgagctggt	tcagaaaatg
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601	gaaaccccaa	ttgcataccg	caatgttctt	cttcgtaaga	acggtataaa	gggagccggt
661	ggtcatagct	atggcatcga	tctaaagtct	tatgacttag	gtgacgagct	tggtcactgat
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1321	ggacctacta	catgtgggta	cctacctact	aatgctgtag	tgaaaatgcc	atgtcctgcc
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1441	attgaaactc	gactccgcaa	gggaggtagg	actagatggt	ttggaggctg	tgtgtttgcc
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1561	tcaggccata	ctggcattac	tggtgacaat	gtggagacct	tgaatgagga	tctccttgag
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1981	atttctgaac	agtcattacg	tcttgtcgag	gccatgggtt	atacttcaga	cctgctcacc
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2161	gcgaaaactta	gtgcaggagt	tgaatttctc	aaggatgctt	gggagattct	caaatttctc
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2341	gtcactatcg	ctggcgcaaa	gttgcgatca	ctcaacttag	gtgaagtctt	catcgctcaa
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3361	atggtgattg	taaatgctgc	taacattacac	ctgaaacatg	gtggtgggtg	agcaggtgca
3421	ctcaacaagg	caaccaatgg	tgccatgcaa	aaggagagtg	atgattacat	taagctaaat
3481	ggccctctta	cagtaggagg	gtcttgtttg	ctttctggac	ataatcttgc	taagaagtgt
3541	ctgcatggtg	ttggacctaa	cctaaatgca	ggtgaggaca	tccagcttct	taaggcagca
3601	tatgaaaatt	tcaattcaca	ggacatctta	cttgacccat	tgttgtcagc	aggcatattt

FIGURE 7B

3661	ggtgcta	aac	cacttcagtc	tttacaagtg	tgcgtgcaga	cggttcgtac	acagggtttat
3721	attgcagtc	ca	atgacaaaagc	tctttatgag	caggttgtca	tggattatct	tgataacctg
3781	aagcctagag	tggaagcacc	ttaaacaagag	gagccacca	acacagaaga	ttccaaaact	
3841	gaggagaaat	ctgtcgtaca	gaagcctgtc	gatgtgaagc	caaaaattaa	ggcctgcatt	
3901	gatgaggtta	ccacaacact	ggaagaaact	aagtttctta	ccaataagtt	actcttgttt	
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4321	gaaatgcttg	ctcatgctga	agagacaaga	aaattaatgc	ctatatgcat	ggatgttaga	
4381	gccataatgg	caaccatcca	acgtaagtat	aaaggaatta	aaattcaaga	gggcatcggt	
4441	gactatgggt	tccgattctt	ctttatatac	agtaaagagc	ctgtagcttc	tattattacg	
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4741	tcaggacagc	gtacagagtt	aggtgttgaa	tttcttaagc	gtggtgacaa	aattgtgtac	
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6781	acaactattg	ctaaaaatag	tggttaagagt	gttgctaaat	tatgtttgga	tgccggcatt	
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7081	gactcccttg	attcttatcc	agctcttgaa	accattcagg	tgacgatttc	atcgataaag	
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7201	aaattctttt	atattattag	tctttcagct	ataatgcagg	tggtcttttg	ctattttgct	
7261	agtcatttca	tcagcaattc	ttggctcatg	tggtttatca	ttagtattgt	acaaatggca	

FIGURE 7C

7321	cccgtttctg	caatgggttag	gatgtacatc	ttcttttgctt	ctttctacta	catatggaag
7381	agctatgttc	atatcatgga	tggttgcacc	tcttcgactt	gcatgatgtg	ctataagcgc
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7621	cagtttaaaa	gaccaatcaa	ccctactgac	cagtcacgt	atattgttga	tagtgttgct
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9601	gtgccttttt	ggataacagc	aatctatgta	ttctgtattt	ctctgaagca	ctgccattgg
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9781	gagacactgt	tgccacttac	acagtataac	aggtatcttg	ctctatataa	caagtacaag
9841	tatttcagtg	gagccttaga	tactaccagc	tatcgtgaag	cagcttgctg	ccacttagca
9901	aaggctctaa	atgacttttag	caactcaggt	gctgatgttc	tctaccaacc	accacagaca
9961	tcaatcactt	ctgctgttct	gcagagtgg	tttaggaaaa	tggaattccc	gtcaggcaaa
10021	gttgaagggt	gcatggtaga	agtaacctgt	ggaactacaa	ctcttaatgg	attgtggttg
10081	gatgacacag	tatactgtcc	aagacatgtc	atttgcacag	cagaagacat	gcttaatcct
10141	aactatgaag	atctgtctcat	tcgcaaatcc	aaccatagct	ttcttggtca	ggctggcaat
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10501	gctggtagtg	acttagaagg	taaattctat	gggtccatttg	ttgacagaca	aactgcacag
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10621	atcaatgggtg	ataggtggtt	tcttaataga	ttcaccacta	ctttgaatga	ctttaacctt
10681	gtggcaatga	agtacaacta	tgaacctttg	acacaagatc	atgttgacat	attgggacct
10741	ctttctgctc	aaacagggaat	tgccgtctta	gatagtgtg	ctgctttgaa	agagctgctg
10801	cagaatggta	tgaatggctg	tactatcctt	ggtagcacta	ttttagaaga	tgagtttaca
10861	ccatttgatg	ttgttagaca	atgctctgg	gttaccttcc	aaggtaagtt	caagaaaatt
10921	gttaagggca	ctcatcattg	gatgctttta	actttcttga	catcactatt	gattcttgtt
10981	caaagtacac	agtgggtcact	gtttttcttt	gtttacgaga	atgctttctt	gccatttact

FIGURE 7D

11041	cttgggtatta	tggcaattgc	tgcattgtgct	atgctgcttg	ttaagcataa	gcacgcattc
11101	ttgtgcttgt	ttctgttacc	ttctcttgca	acagttgctt	actttaatat	ggctctacatg
11161	cctgctagct	gggtgatgcy	tatcatgaca	tggcttgaat	tggctgacac	tagcttgtct
11221	gggtataggc	ttaaggattg	tgttatgtat	gcttcagctt	tagttttgct	tattctcatg
11281	acagctcgca	ctgtttatga	tgatgctgct	agacgtgttt	ggacactgat	gaatgtcatt
11341	acacttgttt	acaaaagtcta	ctatggtaaat	gcttttagatc	aagctatttc	catgtgggccc
11401	ttagttattt	ctgtaaacctc	taactattct	gggtgcgtta	cgactatcat	gttttttagct
11461	agagctatag	tggttggtg	tggtgagat	taccattgt	tatttattac	tggcaacacc
11521	ttacagtgt	tcatgcttgt	ttattgtttc	ttaggctatt	gttgctgctg	ctactttggc
11581	cttttctgtt	tactcaaccg	ttacttcagg	cttactcttg	gtgtttatga	ctacttggtc
11641	tctacacaag	aatttaggta	tatgaactcc	caggggcttt	tgcctcctaa	gagtagtatt
11701	gatgctttca	agcttaacat	taagtgtgtg	ggatttgag	gtaaaccatg	tatcaagggt
11761	gctactgtac	agtctaaaat	gtctgacgta	aagtgcacat	ctgtgggtact	gctctcgggt
11821	cttcaacaac	ttagagtaga	gtcatcttct	aaattgtggg	cacaatgtgt	acaactccac
11881	aatgatattc	ttcttgcaaa	agacacaact	gaagctttcg	agaagatggt	ttctcttttg
11941	tctgttttgc	tatccatgca	gggtgctgta	gacattaata	ggttgtgcga	ggaaatgctc
12001	gataaccgtg	ctactcttca	ggctattgct	tcagaattta	gttctttacc	atcatatgcc
12061	gcttatgcca	ctgcccagga	ggcctatgag	caggctgtag	ctaattgggtga	ttctgaagtc
12121	gttctcaaaa	agttaaagaa	atctttgaat	gtggctaaat	ctgagtttga	ccgtgatgct
12181	gccatgcaac	gcaagttgga	aaagatggca	gatcaggcta	tgacccaaat	gtacaaacag
12241	gcaagatctg	aggacaagag	ggcaaaagta	actagtgcta	tgcaaaacaat	gctcttcact
12301	atgcttagga	agcttgataa	tgatgcactt	aacaacatta	tcaacaattgc	cgctgatgggt
12361	tgtgttccac	tcaacatcat	accattgact	acagcagcca	aactcatgggt	tgttgtccct
12421	gattatggta	cctacaagaa	cacttgtgat	ggtaacacct	ttacatatgc	atctgcactc
12481	tgggaaatcc	agcaagttgt	tgatgcggat	agcaagattg	ttcaacttag	tgaaattaac
12541	atggacaatt	caccaaattt	ggcttggcct	cttattgtta	cagctctaag	agccaactca
12601	gctgttaaac	tacagaataa	tgaactgagt	ccagtagcac	tacgacagat	gtcctgtgcg
12661	gctggtacca	cacaaacagc	ttgtactgat	gacaatgcac	ttgcctacta	taacaattcg
12721	aagggaggta	ggtttgtgct	ggcattacta	tcagaccacc	aagatctcaa	atgggctaga
12781	ttccctaaga	gtgatggtag	aggtagaatt	tacacagaac	tgggaaccacc	ttgtagggtt
12841	gttacagaca	caccaaagg	gcttaaaagt	aaatacttgt	acttcatcaa	aggcttaaac
12901	aacctaaata	gaggtatgg	gctgggcagt	ttagctgcta	cagtacgtct	tcaggctgga
12961	aatgctacag	aagtacctgc	caattcaact	gtgctttcct	tctgtgcttt	tgtagtagac
13021	cctgctaaag	catataagga	ttacctagca	agtgaggag	aaccaattcac	caactgtgtg
13081	aagatgttgt	gtacacacac	tggtacagga	caggcaatta	ctgtaaacacc	agaagctaac
13141	atggaccaag	agtcctttgg	tggtgcttca	tgttgtctgt	attgtagatg	ccacattgac
13201	catccaaatc	ctaaaggatt	ctgtgacttg	aaaggtaagt	acgtccaaat	acctaccact
13261	tgtgctaatt	acccagtggg	ttttacactt	agaaacacag	tctgtaccgt	ctgcggaatg
13321	tggaaagggt	atggctgtag	ttgtgaccaa	ctccgcgaac	ccttgatgca	gtctgcggat
13381	gcatcaactg	ttttaaacgg	gtttgcgggt	taagtgcagc	ccgtcttaca	ccgtgcggca
13441	caggcactag	tactgatgtc	gtctacaggg	cttttgatat	ttacaacgaa	aaagttgctg
13501	gttttgcaaa	gttcctaaaa	actaattgct	gtcgcttcca	ggagaaggat	gaggaaggca
13561	atttattaga	ctcttacttt	gtagttaaga	ggcatactat	gtctaactac	caacatgaag
13621	agactattta	taacttggtt	aaagattgtc	cagcggttgc	tgtccatgac	tttttcaagt
13681	ttagagtaga	tggtgacatg	gtaccacata	tatcacgtca	gcgtctaact	aaatacacaa
13741	tggctgattt	agtctatgct	ctacgtcatt	ttgatgagg	taattgtgat	acattaaaag
13801	aaatactcgt	cacatacaat	tgctgtgatg	atgattattt	caataagaag	gatttggtatg
13861	acttcgtaga	gaatcctgac	atcttacgcg	tatatgctaa	cttaggtgag	cgtgtacgcc
13921	aatcattatt	aaagactgta	caattctgcg	atgctatgcy	tgatgcaggc	attgtaggcg
13981	tactgacatt	agataatcag	gatcttaatt	ggaactggta	cgatttcggt	gatttcgtac
14041	aagtagcacc	aggctgcgga	gttcctattg	tggattcata	ttactcattg	ctgatgcccc
14101	tcctcacttt	gactagggca	ttggctgctg	agtcccatat	ggatgtgat	ctcgcaaaac
14161	cacttattaa	gtgggatttg	ctgaaatatg	attttacgga	agagagactt	tgtctcttcg
14221	accgttattt	taaatattgg	gaccagacat	accatcccaa	ttgtattaac	tgtttggatg
14281	atagggtgat	ccttcattgt	gcaaaacttt	atgtgttatt	ttctactgtg	ttccaccta
14341	caagtttttg	accactagta	agaaaaatat	ttgtagatgg	tgttcctttt	gttgtttcaa
14401	ctggatacca	ttttcgtgag	ttaggagtcg	tacataatca	ggatgtaaac	ttacatagct
14461	cgctctcag	tttcaaggaa	cttttagtgt	atgctgctga	tccagctatg	catcagctt
14521	ctggcaattt	attgctagat	aaacgcacta	catgcttttc	agtagctgca	ctaacaaca
14581	atgttgcttt	tcaaaactgtc	aaaccgggta	attttaataa	agacttttat	gactttgctg
14641	tgtctaaagg	tttctttaag	gaagggaagt	ctgttgaact	aaaacacttc	ttctttgctc
14701	aggatggcaa	cgctgctatc	agtgattatg	actattatcg	ttataatctg	ccaacaatgt

FIGURE 7E

14761	gtgatatcag	acaactccta	ttcgtagtgtg	aagttgttga	taaatacttt	gattgttacg
14821	atgggtggctg	tattaatgcc	aaccaagtaa	tcgttaacaa	tctggataaa	tcagctgggt
14881	tcccattttaa	taaatggggt	aaggctagac	tttattatga	ctcaatgagt	tatgaggatc
14941	aagatgcact	tttcgcgtat	actaagcgta	atgtcatccc	tactataact	caaatgaatc
15001	ttaagtatgc	cattagtgc	aagaatagag	ctcgcaccgt	agctgggtgc	tctatctgta
15061	gtactatgac	aaatagacag	tttcatcaga	aattattgaa	gtcaatagcc	gccactagag
15121	gagctactgt	ggtaattgga	acaagcaagt	tttacgggtg	ctggcataat	atgttaaaaa
15181	ctggtttacg	tgatgtagaa	actccacacc	ttatgggttg	ggattatcca	aaatgtgaca
15241	gagccatgcc	taacatgctt	aggataatgg	cctctcttgt	tcttgctcgc	aaacataaca
15301	cttgctgtaa	cttatcacac	cgtttctaca	ggttagctaa	cgagtgtgcg	caagtattaa
15361	gtgagatggg	catgtgtggc	ggctcactat	atgttaaacc	agggtggaaca	tcacccgggtg
15421	atgctacaac	tgcttatgct	aatagtgtct	ttaacatttg	tcaagctgtt	acagccaatg
15481	taaatgcact	tctttcaact	gatggtaata	agatagctga	caagtatgtc	cgcaatctac
15541	aacacaggct	ctatgagtgt	ctctatagaa	atagggatgt	tgatcatgaa	ttcgtggatg
15601	agttttacgc	ttacctgctg	aaacatttct	ccatgatgat	tctttctgat	aatgctgttg
15661	tgtgctataa	cagtaactat	gcggctcaag	gttttagtagc	tagcattaag	aactttaagg
15721	cagttcttta	ttatcaaaat	aatgtgttca	tgtctgaggc	aaaatgttgg	actgagactg
15781	accttactaa	aggacctcac	gaattttgct	cacagcatac	aatgctagtt	aaacaaggag
15841	atgattacgt	gtacctgcct	taccagatc	catcaagaat	attaggcgca	ggctgttttg
15901	tcgatgatat	tgtaaaaaa	gatggtaac	ttatgattga	aaggttcgtg	tcactggcta
15961	ttgatgctta	cccacttaca	aaacactcta	atcaggagta	tgctgatgct	tttacttgtt
16021	atttacaata	cattagaaag	ttacatgatg	agcttactgg	ccacatgttg	gacatgtatt
16081	ccgtaatgct	aactaatgat	aacacctcac	ggtagtgagg	acctgagttt	tatgaggcta
16141	tgtacacacc	acatacagtc	ttgcaggctg	taggtgcttg	tgtattgtgc	aattcacaga
16201	cttcacttcg	ttgcggtgcc	tgtattagga	gaccattcct	atgttgcaag	tgctgctatg
16261	accatgtcat	ttcaacatca	cacaaattag	tgttgctctg	taatccctat	gtttgcaatg
16321	ccccaggttg	tgatgtcact	gatgtgacac	aactgtatct	aggaggtatg	agctattatt
16381	gcaagtcaca	taagcctccc	attagttttc	cattatgtgc	taatggctcag	gtttttgggt
16441	tatacaaaaa	cacatgtgta	ggcagtgaca	atgtcactga	cttcaatgcg	atagcaacat
16501	gtgattggac	taatgctggc	gattacatac	ttgccaacac	ttgtactgag	agactcaagc
16561	ttttcgcagc	agaaacgctc	aaagccactg	aggaaacatt	taagctgtca	tatggatttg
16621	ctactgtacg	cgaagtactc	tctgacagag	aattgcatct	ttcatgggag	gttggaaaac
16681	ctagcacacc	attgaacaga	aactatgtct	ttactgggta	ccgtgtaact	aaaaatagta
16741	aagtaccagat	tggagagtac	acctttgaaa	aaggtagacta	tgggtgatgct	ttgtgtgaca
16801	gaggtagctac	gacatacaag	ttgaatgttg	gtgattactt	tgtgttgaca	tctcacactg
16861	taatgccact	tagtgacact	actctagtgc	cacaagagca	ctatgtgaga	attactggct
16921	tgtacccaac	actcaacatc	tcagatgagt	tttctagcaa	tgttgcaaat	tatcaaaagg
16981	tcggcatgca	aaagtactct	acactccaag	gaccacctgg	tactggtaag	agtcattttg
17041	ccatcggact	tgctctctat	tacctactctg	ctcgcatagt	gtatacggca	tgctctcatg
17101	cagctgttga	tgccctatgt	gaaaaggcat	taaaatattt	gcccatagat	aaatgtagta
17161	gaatcatacc	tgcgcggtgcg	cgcgtagagt	gttttgataa	attcaaagtg	aattcaacac
17221	tagaacagta	tgttttctgc	actgtaaatg	cattgccaga	aacaactgct	gacattgtag
17281	tctttgatga	aatctctatg	gctactaatt	atgacttgag	tgttgtcaat	gctagacttc
17341	gtgcaaaaaca	ctacgtctat	attggcgatc	ctgctcaatt	accagcccc	cgacatttgc
17401	tgactaaagg	cacactagaa	ccagaatatt	ttaattcagt	gtgcagactt	atgaaaacaa
17461	taggttcaga	catgttcctt	ggaacttgtc	gccgttgtcc	tgctgaaatt	gttgacactg
17521	tgagtgcctt	agtttatgac	aataagctaa	aagcacacaa	ggataagtca	gctcaatgct
17581	tcaaaatggt	ctacaaagg	gttattacac	atgatgtttc	atctgcaatc	aacagacctc
17641	aaataggcgt	tgtaagagaa	tttcttacac	gcaatcctgc	ttggagaaaa	gctgttttta
17701	tctcacctta	taattcacag	aacgctgtag	cttcaaaaat	cttaggattg	cctacgcaga
17761	ctggttgattc	atcacagggt	tctgaatatg	actatgtcat	attcacacaa	actactgaaa
17821	cagcacactc	ttgtaatgtc	aaccgcttca	atgtggctat	cacaagggca	aaaattggca
17881	ttttgtgcat	aatgtctgat	agagatcttt	atgacaaact	gcaatttaca	agtctagaaa
17941	taccacgtcg	caatgtggct	acattacaag	cagaaaaatg	aactggactt	tttaaggact
18001	gtagtaagat	cattactggg	cttcatccta	cacaggcacc	tacacacctc	agcgttgata
18061	taaagttcaa	gactgaagga	ttatgtgttg	acataccagg	cataccaaag	gacatgacct
18121	accgtagact	catctctatg	atgggtttta	aaatgaatta	ccaagtcaat	ggttacccta
18181	atatgtttat	cacccgcgaa	gaagctattc	gtcacgttcg	tgctgtgatt	ggctttgatg
18241	tagagggctg	tcattgcaact	agagatgctg	tgggtactaa	cctacctctc	cagctaggat
18301	tttctacagg	tgtaacttta	gtagctgtac	cgactgggta	tgttgacact	gaaaataaca
18361	cagaattcac	cagagttaat	gcaaaacctc	caccaggtga	ccagtttaaa	catcttatac
18421	cactcatgta	taaaggcttg	ccctggaatg	tagtgcgat	taagatagta	caaagtctca

FIGURE 7F

18481	gtgatacact	gaaaggattg	tcagacagag	tcgtgttcgt	cctttgggcg	catggccttg
18541	agcttacatc	aatgaagtac	tttgtaaga	ttggacctga	aagaacgtgt	tgtctgtgtg
18601	acaaacgtgc	aacttgcttt	tctacttcat	cagatactta	tgccgtgctg	aatcattctg
18661	tgggttttga	ctatgtctat	aacccattta	tgattgatgt	tcagcagtg	ggctttacgg
18721	gtaaccttca	gagtaacat	gaccaacatt	gccaggtaca	tggaatgca	catgtggcta
18781	gttgtgatgc	tatcatgact	agatgtttag	cagtccatga	gtgctttgtt	aagcgcgttg
18841	attggtctgt	tgaataccct	attataggag	atgaactgag	ggttaattct	gcttgcagaa
18901	aagtacaaca	catggttgtg	aagtctgcat	tgcttgctga	taagtttcca	gttcttcctg
18961	acattggaaa	tccaaaggct	atcaagtgtg	tgccctcagg	tgaagtagaa	tggaagtctt
19021	acgatgctca	gccatgtagt	gacaaagcct	acaaaataga	ggagctcttc	tattcttatg
19081	ctacacatca	cgataaattc	actgatgggt	tttgtttgtt	ttggaattgt	aacgttgatc
19141	gttaccacgc	caatgcaatt	gtgtgtagg	ttgacacaag	agtcttgctc	aacttgaact
19201	taccaggctg	tgatgggtgt	agtttgtatg	tgaataagca	tgcatccac	actccagctt
19261	tcgataaaa	tgcatcttact	aatttaaagc	aattgccttt	cttttactat	tctgatagtc
19321	cttgtgagtc	tcatggcaaa	caagttagtg	cgataattga	ttatgtttcca	ctcaaatctg
19381	ctacgtgtat	tacacgatgc	aatttaggtg	gtgctgtttg	cagacacat	gcaaagtgtg
19441	accgacagta	cttggatgca	tataatatga	tgatttctgc	tggaatttag	ctatggattt
19501	acaaacaatt	tgatacttat	aacctgtgga	atacatttac	caggttacag	agtttagaaa
19561	atgtggctta	taatgttgtt	aataaaggac	actttgatgg	acacgccggc	gaagcacctg
19621	tttccatcat	taataatgct	gtttacacaa	aggtagatgg	tattgatgtg	gagatctttg
19681	aaaataagac	aacacttcct	gttaactgtg	catttgagct	ttgggctaag	cgtaacatta
19741	aaccagtgcc	agagattaag	atactcaata	atttgggtgt	tgatacgc	gttaactactg
19801	taatctggga	ctacaaaaga	gaagccccag	cacatgtatc	tacaataggt	gtctgcacaa
19861	tgactgacat	tgccaagaaa	cctactgaga	gtgcttgctc	ttcacttact	gtctgttttg
19921	atggtagagt	ggaaggacag	gtagaccttt	ttagaaacgc	ccgtaatgg	gttttaataa
19981	cagaaggttc	agtcaaagg	ctaacacctt	caaagggacc	agcacaagct	agcgtcaatg
20041	gagtcacatt	aattggagaa	tcagtaaaaa	cacagtttaa	ctactttaag	aaagtacag
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20161	agcccagatc	acaaatggaa	actgactttc	tcgagctcgc	tatggatgaa	ttcatacagc
20221	gatataagct	cgagggtctat	gccttcgaac	acatcgttta	tggaatttc	agtcatggac
20281	aacttggcgg	tcttcattta	atgataagg	tagccaagcg	ctcacaagat	tcaccactta
20341	aattagagga	ttttatccct	atggacagca	cagtgaaaaa	ttacttcata	acagatgcgc
20401	aaacaggttc	atcaaaatgt	gtgtgttctg	tgattgatct	tttacttgat	gactttgtcg
20461	agataataaa	gtcacaaagt	ttgtcagtga	tttcaaaagt	ggtcaagggt	acaattgact
20521	atgctgaaat	ttcattcatg	ctttgggtgta	aggatggaca	tggtgaaacc	ttctacccaa
20581	aactacaagc	aagtcaagcg	tggaaccag	gtgttgcat	gcctaacttg	tacaagatgc
20641	aaagaatgct	tcttgaaaag	tgtgaccttc	agaattatgg	tgaaaatgct	gttataccaa
20701	aaggaataat	gatgaatgtc	gcaaagtata	ctcaactgtg	tcaatactta	aatacactta
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20821	ttgaccagg	tacagctgtg	ctcagacaat	gggttgccaac	tggcacacta	cttgtcgatt
20881	cagatcttaa	tgacttcgtc	tccgacgcag	attctacttt	aattggagac	tgtgcaacag
20941	tacatacggc	taataaatgg	gaccttatta	ttagcgatat	gtatgacctt	aggaccaaac
21001	atgtgacaaa	agagaatgac	tctaaagaag	ggtttttcac	ttatctgtgt	ggatttataa
21061	agcaaaaaact	agccctgggt	ggttctatag	ctgtaaagat	aacagagcat	tcttggaatg
21121	ctgaccttta	caagcttatg	ggccattttc	catgggtggac	agcttttgtt	acaaatgtaa
21181	atgcatcatc	atcggaagca	tttttaattg	gggctaacta	tcttgccaag	ccgaaggaa
21241	aaattgatgg	ctataccatg	catgctaact	acattttctg	gaggaacaca	aatcctatcc
21301	agttgtcttc	ctattcactc	tttgacatga	gcaaatttcc	tcttaaatta	agaggaactg
21361	ctgtaatgtc	tcttaaggag	aatcaaatca	atgatatgat	ttattctctt	ctggaaaaag
21421	gtaggcttat	cattagagaa	aacaacagag	ttgtgggttc	aagtgatatt	cttgtaaca
21481	actaaacgaa	catgtttatt	ttcttattat	ttcttactct	cactagtgg	agtgaccttg
21541	accgggtgcac	cacttttgat	gatgttcaag	ctcctaatta	cactcaacat	cactcatcta
21601	tgaggggggt	ttactatcct	gatgaaattt	ttagatcaga	cactctttat	ttactcagg
21661	atttattttct	tccattttat	tctaagtgtt	cagggtttca	tactattaat	catacgtttg
21721	gcaaccctgt	catacccttt	aaggatggta	tttattttgc	tgccacagag	aaatcaaatg
21781	ttgtccgtgg	ttgggttttt	ggttctacca	tgaacaacaa	gtcacagtcg	gtgattatta
21841	ttaacaattc	tactaatgtt	gttatacag	catgtaaact	tgaattgtgt	gacaaccctt
21901	tctttgctgt	ttctaaaccc	atgggtacac	agacacatac	tatgatattc	gataatgcat
21961	ttaattgcac	tttcgagtac	atatctgatg	ccttttcgct	tgatgtttca	gaaaagtcag
22021	gtaatttttaa	acacttacga	gagtttgtgt	ttaaaaataa	agatgggttt	ctctatgttt
22081	ataagggcta	tcaacctata	gatgtagttc	gtgatctacc	ttctgggttt	aacactttga
22141	aacctatttt	taagttgcct	cttgggtatta	acattacaaa	ttttagagcc	attcttacag

FIGURE 7G

22201	cctttttcacc	tgctcaagac	atttgggggca	cgtcagctgc	agcctatttt	gttggctatt
22261	taaagccaac	tacatttatg	ctcaagtatg	atgaaaatgg	tacaatcaca	gatgctgttg
22321	attgttctca	aaatccactt	gctgaactca	aatgctctgt	taagagcttt	gagattgaca
22381	aaggaattta	ccagacctct	aatttcaggg	ttgttccctc	aggagatgtt	gtgagattcc
22441	ctaataattac	aaacttgtgt	ccttttggag	aggtttttaa	tgctactaaa	ttcccttctg
22501	tctatgcatg	ggagagaaaa	aaaatttcta	atttgtgtgc	tgattactct	gtgctctaca
22561	actcaacatt	tttttcaacc	tttaagtgtc	atggcggttc	tgccactaag	ttgaatgac
22621	tttgcttctc	caatgtctat	gcagattctt	ttgtagtcaa	gggagatgat	gtaagacaaa
22681	tagcgccagg	acaaaactgg	gttattgtcg	attataatta	taaattgcc	gatgatttca
22741	tgggttgtgt	ccttgcttgg	aatactagga	acattgatgc	tacttcaact	ggtaattata
22801	attataaata	taggtatctt	agacatggca	agcttaggcc	ctttgagaga	gacatatcta
22861	atgtgccttt	ctcccctgat	ggcaaacctt	gcacccacc	tgctcttaat	tgttattggc
22921	cattaaatga	ttatggtttt	tacaccacta	ctggcattgg	ctaccaacct	tacagagttg
22981	tagtactttc	ttttgaactt	ttaaattgcac	cggccacggg	ttgtggacca	aaattatcca
23041	ctgaccttat	taagaaccag	tgtgtcaatt	ttaattttaa	tggactcatg	ggtatgttg
23101	tgttaactcc	ttcttcaaag	agatttcaac	catttcaaca	atttggccgt	gatgtttctg
23161	atttctactga	ttccgttcga	gatcctaaaa	catctgaaat	attagacatt	tcaccttgct
23221	cttttggggg	tgtaagtgtg	attacacctg	gaacaaatgc	ttcatctgaa	gttgctgttc
23281	tatatcaaga	tgtaactgc	actgatgttt	ctacagcaat	tcatgcagat	caactcacac
23341	cagcttggcg	catatattct	actggaacaa	atgtattcca	gactcaagca	ggctgtctta
23401	taggagctga	gcattgtcg	acttcttatg	agtgcgacat	tcctattgga	gctggcattt
23461	gtgctagtta	ccatacagtt	tctttattac	gtagtactag	ccaaaaatct	atttgggctt
23521	atactatgtc	tttaggtgct	gatagttcaa	ttgcttactc	taataacacc	attgctatac
23581	ctactaactt	ttcaattagc	attactacag	aagtaatgcc	tgtttctatg	gctaaaacct
23641	ccgtagattg	taatattgtac	atctgcggag	atttacttga	atgtgcta	ttgcttctcc
23701	aatatggtag	cttttgcaca	caactaaatc	gtgcactctc	aggtattgct	gctgaacagg
23761	atcgcaacac	acgtgaagtg	ttcgctcaag	tcaaacaat	gtacaaaacc	ccaacttga
23821	aatatttttg	tggtttta	ttttcacaaa	tattacctga	ccctctaagg	ccaactaaga
23881	ggtcttttat	tgaggacttg	ctctttaata	aggtgacact	cgctgatgct	ggcttcatga
23941	agcaatatgg	cgaatgccta	ggtgatatta	atgctagaga	tctcatttgt	gcgcagaagt
24001	tcaatggact	tacagtgttg	ccacctctgc	tcactgatga	tatgattgct	gcctacactg
24061	ctgctctagt	tagtggtagt	gccactgctg	gatggacatt	tggtgctggc	gctgctcttc
24121	aaataccttt	tgctatgcaa	atggcatata	gggtcaatgg	cattggagtt	acccaaatg
24181	ttctctatga	gaaccacaaa	caaatgccta	accaatttaa	caaggcgatt	agtcaaattc
24241	aagaatcact	tacaacaaca	tcaactgcat	tgggcaagct	gcaagacgtt	gttaaccaga
24301	atgctcaagc	attaaacaca	cttggttaaac	aacttagctc	taattttggt	gcaatttcaa
24361	gtgtgctaaa	tgatatcctt	tcgcgacttg	ataaaagtcga	ggcggaggta	caaattgaca
24421	ggttaattac	aggcagactt	caaagccttc	aaacctatgt	aacacaacaa	ctaatacagg
24481	ctgactgaaa	cagggcttct	gctaactctg	ctgctactaa	aatgtctgag	tggttctctg
24541	gacaactcaa	aagagttgac	ttttgtggaa	agggctacca	ccttatgtcc	ttcccacaag
24601	cagccccgca	tggtgtgtgc	ttcctacatg	tcacgtatgt	gccatcccag	gagaggaact
24661	tcaccacagc	gccagcaatt	tgctcatgaag	gcaaagcata	cttccctcgt	gaagggtgtt
24721	ttgtgtttaa	tggcacttct	tggtttatta	cacagaggaa	cttcttttct	ccacaaataa
24781	ttactacaga	caatacattt	gtctcaggaa	atttgtatgt	cgttattggc	atcataaaca
24841	acacagttta	tgatcctctg	caacctgagc	tcgactcatt	caaagaagag	ctggacaagt
24901	acttcaaaaa	tcatacatca	ccagatgttg	atcttggcga	catttcaggc	attaacgctt
24961	ctgtcgtcaa	cattcaaaaa	gaaattgacc	gcctcaatga	ggctcgctaaa	aatttaaatg
25021	aatcactcat	tgaccttcaa	gaattgggaa	aatatgagca	atatattaaa	tggccttggt
25081	atgtttggct	cggcttcatt	gctggactaa	ttgccatcgt	catggttaca	atcttgcttt
25141	gttgcagac	tagttgttgc	agttgcctca	aggggtgcatg	ctcttgtggt	tcttgctgca
25201	agatttgatga	ggatgactct	gagccagttc	tcaagggtgt	caaattacat	tacacataaa
25261	cgaacttatg	gatttgttta	tgagattttt	tactcttggg	tcaattactg	cacagccagt
25321	aaaaattgac	aatgcttctc	ctgcaagtac	tgttcatgct	acagcaacga	taccgctaca
25381	agcctcactc	cctttcggat	ggcttgttat	tggcgttgca	tttcttgctg	tttttcagag
25441	cgctaccaaa	ataattgcgc	tcaataaaaag	atggcagcta	gccctttata	agggcttcca
25501	gttcatttgc	aatttactgc	tgctatttgt	taccatctat	tcacatcttt	tgcttgcgc
25561	tgcaggtatg	gaggcgcaat	ttttgtacct	ctatgccttg	atatattttc	tacaatgcat
25621	caacgcagtg	agaattatta	tgagattgtg	gctttgttgg	aagtgcgaat	ccaagaacct
25681	attactttat	gatgccaaact	actttgtttg	ctggcacaca	cataactatg	actactgtat
25741	accatataac	agtgtcacag	atacaattgt	cgttactgaa	ggtgacggca	tttcaacacc
25801	aaaactcaaa	gaagactacc	aaattggtgg	ttattctgag	gataggcact	caggtgttaa
25861	agactatgtc	gttgtacatg	gctattttcac	cgaagtttac	taccagcttg	agtctacaca

FIGURE 7H

25921	aattactaca	gacactggta	ttgaaaatgc	tacattcttc	atctttaaca	agcttggttaa
25981	agaccacccg	aatgtgcaaa	tacacacaat	cgacggctct	tcaggagttg	ctaattccagc
26041	aatggatcca	atztatgatg	agccgacgac	gactactagc	gtgcctttgt	aagcacaaga
26101	aagtgagtac	gaacttatgt	actcattcgt	ttcgggaagaa	acaggtagct	taatagttaa
26161	tagcgtactt	ctttttcttg	ctttcgtggg	attcttgcta	gtcacactag	ccatccttac
26221	tgcgcttcga	ttgtgtgctg	actgctgcaa	tattgttaac	gtgagtttag	taaaaccaac
26281	ggttttacgtc	tactcgctg	ttaaaaaatct	gaactcttct	gaaggagttc	ctgatcttct
26341	ggctctaaacg	aactaactat	tattattatt	ctgtttgga	ctttaacatt	gcttatcatg
26401	gcagacaacg	gtactattac	cgttgaggag	cttaaaacaac	tcctggaaca	atggaacctta
26461	gtaatagggtt	tcctattcct	agcctggatt	atgttactac	aatttgcccta	ttctaategg
26521	aacagggtttt	tgtacataat	aaagcttggt	ttcctctggc	tcttggtggc	agtaaacattt
26581	gcttggttttg	tgcttgctgc	tgtctacaga	attaattggg	tgactggcgg	gattgctgatt
26641	gcaatggctt	gtattgtagg	cttgatgtgg	cttagctact	tcgttgcttc	cttcaggctg
26701	tttgctcgt	cccgtcaat	gtggctcattc	aaccagaaa	caaacattct	tctcaatgtg
26761	cctctccggg	ggacaattgt	gaccagaccg	ctcatggaaa	gtgaactgtt	cttggtgtg
26821	gtgatcattc	gtggtcactt	gcgaatggcc	ggacaccccc	tagggcgctg	tgacattaa
26881	gacctgccaa	aagagatcac	tgtggctaca	tcacgaacgc	tttcttatta	caaattagga
26941	gcgtcgcagc	gtgtaggcac	tgattcaggt	tttgctgcat	acaaccgcta	ccgtattgga
27001	aactataaat	taaatacaga	ccacgccggg	agcaacgaca	atattgcttt	gctagtacag
27061	taagtgacaa	cagatgtttc	atcttggtga	cttccagggt	acaatagcag	agatattgat
27121	tatcattatg	aggactttca	ggattgctat	ttggaatctt	gacgttataa	taagttcaat
27181	agtgaacaaa	ttattttaagc	ctctaactaa	gaagaattat	tcggagttag	atgataaga
27241	acctatggag	ttagattatc	cataaaacga	acatgaaaat	tattctcttc	ctgacattga
27301	ttgtatttac	atcttgcgag	ctatatcact	atcaggagtg	tgtagaggt	acgactgtac
27361	tactaaaaga	accttgccca	tcagggaacat	acgagggcaa	ttcaccattt	caccctcttg
27421	ctgacaataa	atttgcacta	acttgacta	gcacacactt	tgcttttgct	tgtgctgacg
27481	gtactcgaca	tacctatcag	ctgcgtgcaa	gatcagtttc	acaaaaactt	ttcatcagac
27541	aagaggagggt	tcaacaagag	ctctactcgc	cactttttct	cattgttgct	gctctagtat
27601	ttttaataact	ttgcttcacc	attaagagaa	agacagaatg	aatgagctca	ctttaattga
27661	cttctatttg	tgctttttag	cctttctgct	attccttggt	ttaataatgc	ttattatatt
27721	ttgggttttca	ctcgaaatcc	aggatctaga	agaaccttgt	accaaagtct	aaacgaacat
27781	gaaactttctc	attgttttga	cttgattttc	tctatgcagt	tgcatatgca	ctgtagtaca
27841	gcgctgtgca	tctaataaac	ctcatgtgct	tgaagatcct	tgtaaggtag	aacactaggg
27901	gttaatactta	tagcactgct	tggctttgtg	ctctaggaaa	ggttttacct	tttcatagat
27961	ggcacactat	ggttcaaaca	tgcacaccta	atgttactat	caactgtcaa	gatccagctg
28021	gtgggtgcgct	tatagctagg	tgttggtacc	ttcatgaagg	tcaccaaact	gctgcattta
28081	gagacgtact	tgttggttta	aataaacgaa	caaattaaaa	tgtctgataa	tggaccccaa
28141	tcaaaccaac	gtagtgtccc	ccgcattaca	tttggtggac	ccacagattc	aactgacaat
28201	aaccagaatg	gaggacgcaa	tggggcaagg	ccaaaacagc	gccgacccca	aggtttaccc
28261	aataatactg	cgtcttggtt	cacagctctc	actcagcatg	gcaaggagga	acttagattc
28321	cctcgaggcc	agggcggttc	aatcaacacc	aatagtggct	cagatgacca	aattggctac
28381	taccgaagag	ctacccgacg	agttcgtggg	ggtagcggca	aaatgaaaga	gctcagcccc
28441	agatgggtact	tctattacct	aggaactggc	ccagaagctt	cacttcccta	cggcgctaac
28501	aaagaaggca	tcgtatgggt	tgcaactgag	ggagccttga	atacacccaa	agaccacatt
28561	ggcaccgcga	atcctaataa	caatgctgcc	accgtgctac	aacttctcta	aggaacaaca
28621	ttgccaaaag	gcttctacgc	agagggaagc	agaggcggca	gtcaagcctc	ttctcgctcc
28681	tcatcacgta	gtcgcggtta	ttcaagaaat	tcaactcctg	gcagcagtag	gggaaattct
28741	cctgctcgaa	tggctagcgg	aggtgggtgaa	actgccctcg	cgctattgct	gctagacaga
28801	ttgaaccagc	ttgagagcaa	agtttctggt	aaaggccaac	aacaacaagg	ccaaactgtc
28861	actaagaaat	ctgctgctga	ggcatctaaa	aagcctcgcc	aaaaacgtac	tgccacaaaa
28921	cagtacaacg	tactcaagc	atttgggaga	cgtgggtccag	aacaaaccca	aggaattttc
28981	ggggaccaag	acctaatacag	acaaggaaact	gattacaaac	attggccgca	atttgcacaa
29041	tttgctccaa	gtgcctctgc	attcttttga	atgtcacgca	ttggcatgga	agtcacacct
29101	tcgggaacat	ggctgactta	tcatggagcc	attaaattgg	atgacaaaga	tccacaattc
29161	aaagacaacg	tcatactgct	gaacaagcac	attgacgcat	acaaaacatt	cccaccaaca
29221	gagcctaaaa	aggacaaaaa	gaaaaagact	gatgaagctc	agcctttgcc	gcagagacaa
29281	aagaagcagc	ccactgtgac	tcttcttctc	gcggctgaca	tggatgattt	ctccagacaa
29341	cttcaaaaatt	ccatgagtgg	acgttctgct	gattcaactc	aggcataaac	actcatgatg
29401	accacacaag	gcagatgggc	tatgtaaacg	ttttcgcaat	tccgtttacg	atacatagtc
29461	tactcttggtg	cagaatgaat	tctcgttaact	aaacagcaca	agtaggttta	gttaacttta
29521	atctcacata	gcaatcttta	atcaatgtgt	aacattaggg	aggacttgaa	agagccacca
29581	cattttcatc	gaggccacgc	ggagtacgat	cgagggtaca	gtgaataatg	ctaggagag

FIGURE 7I

29641 ctgcctatat ggaagagccc taatgtgtaa aattaatttt agtagtgcta tccccatgtg
29701 attttaatag cttcttagga gaatgac

FIGURE 8 A

1 atattaggtt ttacctacc caggaaaagc caaccaacct cgatctcttg tagatctgtt
61 ctctaaacga actttaaaat ctgtgtagct gtcgctcggc tgcattgccta gtgcacctac
121 gcagtataaa caataataaa tttactgtc gttgacaaga aacgagtaac tctccctct
181 tctgcagact gcttacgggt tctccgtgt tgcagtcgat catcagcata cctaggtttc
241 gtccgggtgt gaccgaaagg taagatggag agccttggtc ttggtgtcaa cgagaaaaca
301 caggtccaac tcagtttgcc tgccttcag gtagagacg tgctagtgcg tggcttcggg
361 gactctgttg aagaggccct atcggaggca cgtgaacacc tcaaaaatgg cactgtgtgt
421 ctagtagagc tggaaaaagg cgtactgcc cagcttgaac agccctatgt gttcattaaa
481 cgttctgatg ccttaagcac caatcacggc cacaaggctg ttgagctggt tgcagaaatg
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601 gaaaccccaa ttgcataccg caatgttctt ctctgaaga acggtataa gggagccggt
661 ggtcatagct atggcatcga tctaaagtct tatgacttag gtgacgagct tggcactgat
721 cccattgaag attatgaaca aaactggaac actaagcatg gcagtgtgtc actccgtgaa
781 ctactcgtg agtcaatgg aggtgcagtc actcgtatg tgcacaaca tttctgtggc
841 ccagatgggt accctcttga ttgcataaa gatcttctg cagcgcggg caagtcaatg
901 tgcactctt ccgaacaact tgattacac gagtcaaga gaggtgtcta ctgctccgt
961 gaccatgagc atgaaatgc ctggttact gagcgtctg ataagagcta cgagcaccag
1021 acacccttg aaattaagag tgccaagaaa ttgacactt tcaaggggga atgcccagg
1081 ttgtgttc ctcttaactc aaaagtcaaa gtcattcaac caggtgtga aaagaaaaag
1141 actgagggtt tcatggggcg tatacgtct gtgtaccctg ttgcatcctc acaggagtgt
1201 aacaatatgc actgtctac ctgatgaaa tgtaatcatt gcgatgaagt ttcatggcag
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1321 ggacctacta catgtgggta cctacctact aatgcttag tgaaaatgcc atgtctgcc
1381 tgtcaagacc cagagattgg acctgagcat agtgttcag attatcaca ccaactaaac
1441 attgaaactc gactccgcaa gggaggtagg actagatgtt ttggaggctg tgtgttgcc
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1681 gttgccatca tttggcatc tttctgtct tctacaagt ctttattga cactataaag
1741 agtcttgatt acaagtctt caaaaccatt gttgagtcct gcggtacta taaagttacc
1801 aagggaagc ccgtaaaagg tcttggaac attggacaac agagatcagt ttaacacca
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2341 gtcactatcg ctggcgcaaa gttgcgatca ctcaacttag gtgaagtct catcgtcaa
2401 agcaaggagc ttaccgtca gtgtatact ggcaaggagc agctgcaact actcatgcct
2461 cttaggcac caaaagaagt aaccttctt gaaggtgatt cacatgacac agtacttacc
2521 tctgaggagg ttgttctcaa gaacggtgaa ctgaagcac tgaagagcc cgttgatagc
2581 ttacaaaatg gagctatcgt tggcacacca gtctgtgtaa atggcctcat gctcttagag
2641 attaaggaca aagaacaata ctgcgcatg tctcctggtt tactggctac aaacaatgtc
2701 tttcgcttaa aaggggggtc accaattaaa ggtgtaacct ttggagaaga tactgtttgg
2761 gaagttcaag gttacaagaa ttgagaatc acatttgagc ttgatgaacg tttgacaaa
2821 gtgcttaatg aaaagtgtc tgtctacact gttgaatccg gtaccgaagt tactgagttt
2881 gcatgtgtg tagcagaggc tttgtgaag actttacaac cagtttctga tctccttacc
2941 aacatgggta ttgatctga tgagtggagt gtagctacat tctactatt tgatgatgct
3001 ggtgaagaaa acttttcatc acgtatgtat tttcctttt accctccaga tgaggaagaa

FIGURE 8 B

3061 gaggacgatg cagagtgtga ggaagaagaa attgatgaaa cctgtgaaca tgagtacggt
3121 acagaggatg attatcaagg tctccctctg gaatttgggtg cctcagctga aacagttcga
3181 gttgaggaag aagaagagga agactggctg gatgatacta ctgagcaatc agagattgag
3241 ccagaaccag aacctacacc tgaagaacca gttaatcagt ttactggtta tttaaaactt
3301 actgacaatg ttgccattaa atgtgttgac atcgtaagg aggcacaaag tgctaactct
3361 atggtgattg taaatgctgc taacatacac ctgaacatg gtggtggtgt agcaggtgca
3421 ctcaacaagg caaccaatgg tgccatgcaa aaggagagtg atgattacat taagctaaat
3481 ggccctctta cagtaggagg gtcttgttg ctttctggac ataactctgc taagaagtgt
3541 ctgcatgttg ttggacctaa cctaaatgca ggtgaggaca tccagcttct taaggcagca
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3661 ggtgctaaac cacttcagtc ttacaagtg tgcgtgcaga cggttcgtac acaggtttat
3721 atgcatgca atgacaaagc tctttatgag caggttgta tggattatct tgataacctg
3781 aagcctagag tggaagcacc taaacaagag gagccaccaa acacagaaga ttccaaaact
3841 gaggagaaat ctgtctgaca gaagcctgtc gatgtgaagc caaaaattaa ggcctgcatt
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3961 gctgatatca atggttaagt ttaccatgat tctcagaaca tgcttagagg tgaagatatg
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4321 gaaatgcttg ctcatctga agagacaaga aaattaatgc ctatatgcat ggatgttaga
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4561 tttaactctg aagaggctgc gcgctgtatg cgttctctta aagctcctgc cgtagtgtca
4621 gtatcatcac cagatgctgt tactacatat aatggatacc tcacttcgtc atcaagaca
4681 tctgaggagc actttgtaga aacagtttct ttggctggct cttacagaga ttggtcctat
4741 tcaggacagc gtacagagti aggtgttgaa ttcttaagc gtggtgacaa aattgtgtac
4801 cacactctgg agagccccgt cgagtttcat ctgacggtg aggttctttc acttgacaaa
4861 ctaaagagtc tcttatccct gcgggagggt aagactataa aagtgttcac aactgtggac
4921 aacactaatc tccacacaca gcttgtggat atgtctatga catatggaca gcagtttggg
4981 ccaacatact tggatgggic tgatgttaca aaaattaaac ctcatgtaa tcatgagggt
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5221 ttgtctagtg ttttattagc acttcaacag cttgaagtca aattcaatgc accagcatt
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5341 gcttacagta ataaaactgt tggcgagctt ggtgatgtca gagaactat gacctatctt
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5461 ggtcagaaaa ctactacctt aacgggtgta gaagctgtga tgtatatggg tactctatct
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5581 tatctagtac aacaagagtc ttcttttgtt atgatgtctg caccacctgc tgagtataaa
5641 ttacagcaag gtacattctt atgtgcgaat gagtacactg gtaactatca gtgtgtcat
5701 tacactcata taactgctaa ggagaccctc tategtattg acggagctca ccttacaag
5761 atgtcagagt acaaaggacc agtactgat gttttctaca aggaacatc ttactatca
5821 accatcaagc ctgtgtcgtg taaactcgtg ggagttactt acacagagat tgaacaaaa
5881 ttggatgggt attataaaaa ggataatgct tactatacag agcagcctat agacctgtg
5941 ccaactcaac cattacaaaa tgcgagtttt gataatttca aactcacatg tttaacaca
6001 aaatttctgt atgattttaa tcaaatgaca ggcttcacaa agccagcttc acgagagcta
6061 tctgtcacat tcttccaga cttgaatggc gatgtagtgg ctattgacta tagacactat
6121 tcagcgagti tcaagaaagg tgctaaatta ctgcataagc caattgttg gcacattaac

FIGURE 8 C

6181 caggctacaa ccaagacaac gttcaaacca aacacttggt gttacgttg tctttggagt
6241 acaaagccag tagatacttc aaattcattt gaagttctgg cagtagaaga cacacaagga
6301 atggacaatc ttgcttgtga aagtcaacaa cccacctctg aagaagtagt ggaaaatcct
6361 accatacaga aggaagtcac agagtgtgac gtgaaaacta ccgaagttgt aggcaatgtc
6421 atacttaaac catcagatga aggtgttaaa gtaacacaag agttagggtca tgaggatctt
6481 atggctgctt atgtggaaaa cacaagcatt accattaaga aacctaata gctttcacta
6541 gccttaggtt taaaaacaat tggcactcat ggtattgctg caattaatag tgttcttgg
6601 agtaaaattt tggttatgt caaaccattc ttaggacaag cagcaattac aacatcaaat
6661 tgcgctaaga gattagcaca acgtgtgttt aacaattata tgccttatgt gtttacatta
6721 ttgttccaat tgtgtacttt tactaaaagt accaattcta gaattagagc ttcactacct
6781 acaactattg ctaaaaatag tgtaagagt gttgctaaat tatgtttgga tggcggcatt
6841 aattatgtga agtcacccaa attttctaaa ttgtcaca tcgctatgtg gctattgttg
6901 ttaagtattt gcttaggttc tctaactgt gtaactgctg cttttggtgt actctatct
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7021 gttactacta tggatttctg tgaaggttct ttctcttgc gcaattgtt aagtggatta
7081 gactcccttg attctatcc agctcttgaa accattcagg tgacgatttc atcgtaacag
7141 ctgacttga caattttagg tctggccgct gagtgggttt tggcatatat gttgttcaca
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7321 cccgtttctg caatggttag gatgtacac ttcttggctt ctcttacta catatgggaag
7381 agctatgttc atatcatgga tggttgcacc tctcgactt gcatgatgtg ctataagcgc
7441 aatcgtgcca cagcggttga gtgtacaact attgttaag gcatgaagag atctttctat
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7561 gacacatttt gcaactgtag tacattcatt agtgatgaag ttgctcgtga ttgtcactc
7621 cagttaaaaa gaccaatcaa ccctactgac cagtcacgt atattgttga tagtgttgc
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7741 catccgctct cccattttgt caatttagac aatttgagag ctaacaacac taaaggttca
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7861 tctgttctg tgtactacag tcagctgatg tgccaaccta ttctgttgc tgaccaagct
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8221 acctataata aggttgaata catgacgcc agagatcttg gcgcatgtat tgactgtaat
8281 gcaaggcata tcaatgccc agtagcaaaa agtcacaatg ttactcat ctggaatgta
8341 aaagactaca tgtctttatc tgaacagctg cgtaaacaaa ttctagtgc tgccaagaag
8401 aacaacatac cttttagact aactgtgct acaactagac aggttgtcaa tgcataact
8461 actaaaatct cactcaaggg tggtaagatt gtagtactt gtttaaaact tatgcttaag
8521 gccacattat tgtgcgttct tgtgcattg gttgttata tcttatgcc agtacataca
8581 ttgtcaatcc atgatgtta cacaatgaa atcattggtt acaaagccat tcaggatggt
8641 gtcactcgtg acatatttc tactgatgat tgtttgcaa ataaacatgc tggttttgac
8701 gcatggttta gccagcgtgg tggttcatac aaaaatgaca aaagctgccc tgtagtagct
8761 gctatcatta caagagagat tggttcata gtgcctggct taccgggtac tgtgctgaga
8821 gcaatcaatg gtgacttctt gcattttcta cctcgtgtt ttagtgctgt tggcaacatt
8881 tgctacacac ctccaact cattgagtat agtgatttg ctacctctgc ttgcgttctt
8941 gctgctgagt gtacaatttt taaggatgct atgggcaaac ctgtgccata ttgttatgac
9001 actaatttgc tagagggttc tatttctat agtgagcttc gtccagacac tcttatgtg
9061 cttatggatg gttccatcat acagtttctt aacacttacc tggagggttc ttttagagta
9121 gtaacaactt ttgatgtga gtactgtaga catggtacat gcgaaaggtc agaagtaggt
9181 atttgcttat ctaccagtgg tagatgggtt ctaataatg agcattacag agctctatca
9241 ggagtittct gtggtgttga tgcgatgaat ctcatagcta acatctttac tctcttctg

FIGURE 8 D

9301 caacctgtgg gtgctttaga tgtgtctgct tcagtagtgg ctgggtggtat tattgccata
9361 ttgggtgactt gtgctgccta ctactttatg aaattcagac gtgttttgg tgagtacaac
9421 catgttgttg ctgctaagtc acttttggtt ttgatgtctt tcactatact ctgtctggta
9481 ccagcttaca gctttctgcc gggagcttac tcagtctttt acttgtacti gacattctat
9541 ttcaccaatg atgttcatt ctggctcac ctcaatggt ttgcatggt ttctctatt
9601 gtgcctttt ggataacagc aatctatgta ttctgtattt ctctgaagca ctgccattgg
9661 ttcttaaca actatcttag gaaaagagtc atgttaatg gagttacatt tagtaccttc
9721 gaggaggctg ctttgtgtac cttttgctc aacaaggaaa tgtacctaaa attgcgtagc
9781 gagacactgt tggcacttac acagtataac aggtatcttg ctctataaa caagtacaag
9841 tatttcagtg gagccttaga tactaccagc tatcgtgaag cagcttgctg ccacttagca
9901 aaggctctaa atgacttag caactcaggt gctgatgttc tctaccaacc accacagaca
9961 tcaatcactt ctgctgttct gcagagtggg tttaggaaaa tggcattccc gtcaggcaaa
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10081 gatgacacag tatactgtcc aagacatgtc attgcacag cagaagacat gcttaacct
10141 aactatgaag atctgtcat tcgcaaatcc aaccatagct ttctgttca ggctggcaat
10201 gttcaacttc gtgtattgg ccattctatg caaaattgtc tgcttaggct taaagttag
10261 acttctaacc ctaagacacc caagtataaa ttgtccgta tccaacctgg tcaaacattt
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10381 aatcatacca ttaaagggtc ttctttaat ggatcatgtg gtagtgttg tttaacatt
10441 gattatgatt gcgtgtctt ctgctatag catcatatgg agctccaac aggagtacac
10501 gctggtactg acttagaagg taaattctat ggtccatttg ttgacagaca aactgcacag
10561 gctgcaggta cagacacaac cataacatta aatgttttg catggctgta tgctgtgtt
10621 atcaatggtg ataggtggtt tcttaataga ttcaccacta cttgaatga cttaacctt
10681 gtggcaatga agtacaacta tgaaccttg acacaagatc atgttgacat attgggacct
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10801 cagaatggta tgaatgtcg tactatcctt ggtagcacta ttttagaaga tgagttaca
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10981 caaagtacac agtggctact gttttctt gtttagaga atgctttct gccatttact
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11101 ttgtgctgt ttctgttacc ttcttgcga acagtgtct actttaatat ggtctacatg
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11281 acagctcgca ctgtttatga tgatgtgct agacgtgtt ggacactgat gaatgtcatt
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11461 agagctatag ttttgtgtg ttgtagtat taccattgt tatttattac tggcaacacc
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11581 cttttctgt tactcaaccg ttacttcagg ctactcttg gtgtttatga ctacttgctc
11641 tctacacaag aatttaggta tatgaactcc caggggcttt tgctctcaa gagtagtatt
11701 gatgcttca agcttaacat taagtgttg ggtattggag gtaaacatg tatcaaggt
11761 gctactgtac agtctaaaat gctgacgta aagtcacat ctgtgttact gctctcggt
11821 ctcaacaac tttagtaga gtcattctt aaattgtgg cacaatgtgt acaactccac
11881 aatgatattc ttctgcaaa agacacaact gaagcttcg agaagatggt ttctttttg
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12301 atgcttagga agcttgataa tgatgcactt aacaacatta tcaacaatgc gcgtgatggt
12361 tgtgtccac tcaacatcat accattgact acagcagcca aactcatggt tgtgtccct

FIGURE 8 E

12421 gattatggta cctacaagaa cacttgtgat ggtaacacct ttacatatgc atctgcactc
12481 tgggaaatcc agcaagtgtg tgatgcggat agcaagattg ttcaacttag tgaaattaac
12541 atggacaatt caccaaaattt ggcttggcct cttattgta cagctctaag agccaactca
12601 gctgttaaac tacagaataa tgaactgagt ccagtagcac tacgacagat gtcctgtgcg
12661 gctggtacca cacaacacgc ttgtactgat gacaatgcac ttgcctacta taacaattcg
12721 aaggagggia ggittgtgct ggcttacta tcagaccacc aagatctcaa atgggctaga
12781 ttccctaaga gtgatgttac aggtacaatt tacacagaac tggaaccacc ttgtagggtt
12841 gttacagaca caccaaaagg gcctaaagtg aaatactgtt acttcatcaa aggcctaaac
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13021 cctgctaaag catataagga ttacntagca agtggaggac aaccaatcac caactgtgtg
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13321 tggaaagggt atggctgtag ttgtacca ctcgcgaac ccttgatgca gctgaggat
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13441 caggcactag tactgatgtc gtctacagg cttttgat ttacaacgaa aaagtgtctg
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13621 agactattta taacttgggt aaagattgtc cagcgggtgc tgtccatgac ttttcaagt
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13921 aatcattatt aaagactgta caattctgc atgctatgcg tgatgcaggc attgtaggcg
13981 tactgacatt agataatcag gatctaatg ggaactggt cgaattcggg gatttctgac
14041 aatgacacc aggtgcgga gticctattg tggattcata ttactcattg ctgatccca
14101 tctcacttt gactagggca ttggctgtg agtcccatat ggatgctgat ctgcgaaaac
14161 cacttattaa gtgggatttg ctgaaatag attttacgga agagagactt tgtctctcg
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14341 caagtittgg accactagta agaaaaatat ttgtatagg ttttctttt gttgttcaa
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14461 cgcgtctcag ttcaaggaa cttttagtgt atgctgtga tccagctatg catgcagctt
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14581 atgttgcctt tcaactgtc aaacccggt attttaataa agactttat gactttgctg
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14701 aggatggcaa cgctgctatc agtgattatg actattatcg ttataatcg ccaacaatgt
14761 gtgatatcag acaactccta ttctagtgtg aagtgttga taaatacttt gattgttacg
14821 atgggtgctg tattaatgcc aaccaagtaa tctgtaacaa tctggataaa tcagctggtt
14881 tcccatttaa taaatgggt aaggctagac ttattatga ctcaatgagt tatgaggatc
14941 aagatgcact ttgcgctat actaagcgt atgtcatccc tactataact caaatgaatc
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15181 ctgtttacag tgatgtaga actccacacc ttatgggtg ggattatcca aaatgtgaca
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15301 ctgtgtgtaa ctatcacac cgttttaca ggtagctaa cgaagtgtgc caagtattaa
15361 gtgagatggt catgtgtggc ggctcactat atgttaaac aggtggaaca tcatccgggt
15421 atgctacaac tgcattatgt aatagtgtc ttacatttg tcaagctgtt acagccaatg
15481 taaatgcact tcttcaact gatgtaata agatagctga caagtatgc cgcaatctac

FIGURE 8 F

15541 aacacaggct ctatgagtgt ctctatagaa atagggatgt tgatcatgaa ttcgtggatg
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15661 tgtgctataa cagtaactat gcggctcaag gtttagtagc tagcattaag aactttaagg
15721 cagttcttta ttatcaaaat aatgtgttca tgtctgaggc aaaatgttgg actgagactg
15781 acctactaa aggacctcac gaattttgct cacagcatac aatgctagtt aaacaaggag
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15961 ttgatgctta cccacttaca aaacatccta atcaggagta tgcgatgctc tticacttgt
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16321 ccccggttg tgatgtcact gatgtgacac aactgtatct aggaggtatg agctattatt
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16441 tatacaaaaa cacatgtgta ggcagtgaca atgtcactga cttaaatgcg atagcaacat
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16621 ccactgtacg cgaagtactc tctgacagag aattgcatct ttcatgggag gttggaaaac
16681 ctgaccacc attgaacaga aactatgtct ttactggta ccgtgtaact aaaaatagta
16741 aagtacagat tggagagtac accttgaaa aaggtgacta tggatgatgt gttgtgtaca
16801 gaggtactac gacatacaag ttgaatgttg gtgattactt tgtgtgaca tctcacactg
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17161 gaatcatacc tgcgctgcg cgcttagagt gttttgataa attcaaagtg aattcaacac
17221 tagaacagta tgtttctgc actgtaaatg cattgccaga aacaactgct gacattgtag
17281 tctttgatga aatctctatg gctactaatt atgacttgag tgttgtaact gctagacttc
17341 gtgcaaaaca ctacgtctat attggcgatc ctgctcaatt accagcccc cgcacattgc
17401 tgactaaagg cacactagaa ccagaatatt ttaattcagt gtgcagactt atgaaaacaa
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17581 tcaaaatgtt ctacaaagg gttattacac atgatgttct atcgaatc aacagacctc
17641 aaataggcgt tgtaagagaa ttcttacac gcaatcctgc ttggagaaaa gctgttttta
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18061 taaagttcaa gactgaagga ttatgtgttg acataccagg cataccaaag gacatgacct
18121 accgtagact catctctatg atgggttca aatgaatta ccaagtcaat ggttacccta
18181 atatgtttat caccgcgaa gaagctattc gtcacgttcg tgcgtggatt ggctttgatg
18241 tagagggtcg tcatgcaact agagatgctg tgggtactaa cctacctc cagctaggat
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18361 cagaattcac cagagttaat gcaaacctc caccagggtga ccagtttaa catcttatac
18421 cactcatgta taaaggcttg ccctggaatg tagtgcgtat taagatagta caaatgtca
18481 gtgatacat gaaaggattg tcagacagag tctgttcgt cctttgggcg catggctttg
18541 agcttacatc aatgaagtac ttgtcaaga ttggacctga aagaactgt tctctgtgtg
18601 acaaacgtgc aactgtctt tctacttcat cagatactta tgcctgctgg aatcattctg

FIGURE 8 G

18661 tgggttttga ctatgtctat aaccattta tgattgatgt tcagcagtg ggctttacgg
18721 gtaacctta gagtaacct gaccaacatt gccagggtaca tggaaatgca catgtggcta
18781 gttgtgatgc tatcatgact agatgtttag cagtccatga gtgctttgtt aagcgcgttg
18841 attggtctgt tgaataacct attataggag atgaactgag ggtaattct gcttcagaa
18901 aagtacaaca catggttgtg aagtctgcat tgcttctga taagtcca gttctcatg
18961 acattgaaa tccaaaggct atcaagtgtg tgcctcaggc tgaagtagaa tggaaattct
19021 acgatgtca gccatgtagt gacaaagctt acaaaataga ggaactcttc tattcttatg
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19141 gttaccagc caatgcaatt gtgtgtaggt ttgacacaag agtcttgca aactgaact
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19321 cttgtgagtc tcatggcaaa caagtagtgt cggatattga ttatgtcca ctcaaactg
19381 ctacgtgtat tacacgatgc aatttaggtg gtgctgtttg cagacaccat gcaaagtgt
19441 accgacagta cttggatgca tataatatga tgatttctg tggatttagc ctatggattt
19501 acaacaatt tgatacttat aacctgtgga atacattac caggttacag agtttagaaa
19561 atgtggctta taatgttgtt aataaaggac actttgatgg acacgccggc gaagcacctg
19621 ttccatcat taataatgct gttacacaa aggtagatgg tattgatgtg gagatctttg
19681 aaaataagac aacacttctt gttaatgttg catttagctt ttgggctaag cgtaacatta
19741 aaccagtgcc agagattaag atactcaata atttgggtgt tgatctgct gctaatactg
19801 taatctggga ctacaaaaga gaagcccag cacatgtatc tacaataggt gtctgcacaa
19861 tgactgacat tgccaagaaa cctactgaga gtgctgttc ttacttact gtctgtttg
19921 atggtagagt ggaaggacag gtagaccttt ttgaaacgc ccgtaatgtt gtttaataa
19981 cagaaggctt agtcaaagg ctacacctt caaagggacc agcacaagct agcgtcaatg
20041 gagtcacatt aattggagaa tcagtaaaaa cacagttaa ctactttaag aaagtagacg
20101 gcattatca acagttgctt gaaacctact ttactcagag cagagactta gaggatttta
20161 agcccagatc acaaatggaa actgacttcc tcgagctgc tatggatgaa ttcatacagc
20221 gatataagct cgagggtctat gccttcgaac acatcgttta tggagatttc agtcatggac
20281 aacttggcgg tcttatttta atgataggct tagccaagcg ctcaaatgac taccactta
20341 aattagagga tttttacct atggacagca cagtgaataa ttacttata acagatgcgc
20401 aaacaggctt atcaaatgt gtgtgtctg tgattgatct ttacttgat gactttgtg
20461 agataataaa gtcaaatg ttgtcagtga ttcaaaaagt ggtaaggtt acaattgact
20521 atgtgaaat ttacttcatg ctttgggtga aggatggaca tgttgaacc ttctaccaa
20581 aactacaagc aagtcaagcg tggcaaccag gtgttcgat gcctaactg tacaagatgc
20641 aaagaatgct tcttgaaga ttgtacctc agaattatgg tgaatgct gttatacaa
20701 aaggaataat gatgaatgt gcaaatgata ctcaactgtg tcaatactta aataactta
20761 ctttagctgt acctacaac atgagagtt ttactttgg tgctggctct gataaaggag
20821 ttgaccagg tacagctgtg ctacacaat ggttccaac tggcacacta cttgtcgatt
20881 cagatcttaa tgacttcgtc tccgacgcag attctactt aattggagac tgtgcaacg
20941 tacatacggc taataaatgg gacctatta ttacgatat gtatgacctt aggaacaaac
21001 atgtgacaaa agagaatgac tctaaagaag ggtttttcac ttatctgtgt ggatttataa
21061 agcaaaaact agccctgggt ggttctatag ctgtaaatg aacagagcat tcttggaaatg
21121 ctgaccttta caagcttatg ggccatttct catgggtggac agctttgtt acaaatgtaa
21181 atgcatcatc atcgaagca ttttaattg gggctaacta tcttggcaag ccgaaggaaac
21241 aaattgatgg ctataccatg catgctaact acatttctg gaggaacaca aatctatcc
21301 agttgtcttc ctattcactc ttgacatga gcaatttcc tcttaataa agaggaaactg
21361 ctgtaatgtc tcttaaggag aatcaaatca atgatgat ttattctctt ctggaaaaag
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21481 actaaacgaa catgtttatt ttctattat ttctactct cactagtgtt agtgacctg
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21661 atttatttct tccattttat tctaattgta cagggttca tactattaat catacgtttg
21721 gcaaccctgt catacctttt aaggatggta tttatttgc tgccacagag aatcaaatg

FIGURE 8 H

21781 ttgtccgtgg ttgggtttt gggtctacca tgaacaacaa gtcacagtcg gtgattatta
21841 ttaacaattc tactaatgtt gttatacgag catgtaactt tgaattgtgt gacaaccctt
21901 tctttgctgt ttctaaccac atgggtacac agacacatac tatgatattc gataatgcat
21961 ttaattgcac ttctgagtac atatctgatg ccttttcgct tgatgtttca gaaaagtcag
22021 gtaattttaa acacttacga gagtttgtgt ttaaaaaata agatgggttt ctctatgttt
22081 ataagggcta tcaacctata gatgtagttc gtgatctacc ttctggtttt aacactttga
22141 aacctatttt taagtgcct ctgggtatta acattacaaa ttttagagcc attcttacag
22201 ccttttcacc tgctcaagac attgggggca cgtcagctgc agcctatttt gtggctatt
22261 taaagccaac tacatttatg ctcaagtatg atgaaaatgg tacaacaca gatgctgttg
22321 attgtttca aaatccactt gctgaactca aatgctctgt taagagcttt gagattgaca
22381 aaggaattta ccagacctct aatttcaggg ttgtccctc aggagatgtt gtgagattcc
22441 ctaattattc aaacttgtgt ccttttgagg aggtttttaa tgcactaaa ttcccttctg
22501 tctatgcatg ggagagaaaa aaaatttcta attgtgttgc tgattactct gtgctctaca
22561 actcaacatt ttttcaacc tttaagtgt atggcgtttc tgccactaag ttgaatgac
22621 ttgtcttc caatgtctat gcagattctt ttgtagtcaa gggagatgat gtaagacaaa
22681 tagcgccagg acaactggt gttattgctg attataatta taaattgcca gatgattca
22741 tgggttgtgt ccttgcttgg aatactagga acattgatgc tacttcaact ggtaattata
22801 attataata taggtatctt agacatggca agcttaggcc ctttgagaga gacatatcta
22861 atgtgccttt cttccctgat ggcaaaccct gcacccacc tgccttaatt tgtattggc
22921 cattaaatga ttatggtttt tacaccacta ctggcattgg ctaccaacct tacagagttg
22981 tagtacttcc tttgaactt taaatgcac cggccacggt ttgtggacca aaattatcca
23041 ctgaccttatt taagaaccag tgtgtcaatt ttaattttaa tggactcact ggtactggtg
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23161 atttactga ttccgttca gatcctaaaa catctgaaat attagacatt tcacctgctg
23221 cttttggggg tgtaagtgt attacacctg gaacaaatgc ttcatctgaa gttgctgttc
23281 tatatcaaga tgttaactgc actgatgttt ctacagcaat tcatgcagat caactcacac
23341 cagcttgctg catatattct actggaaaca atgtattcca gactcaagca ggctgtctta
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23461 gtgctagtta ccatacagtt tctttattac gtagtactag ccaaaaatct atttggtctt
23521 atactatgct tttaggtgct gatagtcaa ttgcttactc taataacacc attgctatac
23581 ctactaactt tcaattagc attactacag aagtaatgcc tgtttctatg gctaaaacct
23641 ccgtagattg taatatgtac atctgaggag attctactga atgtgctaat ttgcttctcc
23701 aatatgtag cttttgcaca caactaaac gtgcactc aggtattgct gctgaacagg
23761 atcgcaacac acgtgaagtg ttcgtcaag tcaacaatat gtacaaaacc ccaactttga
23821 aatattttgg tggtttaatt tttcacaaa tattactga ccttctaaag ccaactaaga
23881 ggtctttat tgaggacttg ctcttaata aggtgacact cgctgatgtt ggcttcatga
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24001 tcaatggact tacagtgtt ccacctctgc tcatgatga tatgattgct gcctacactg
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24241 aagaatcact tacaacaaca tcaactgcat tgggcaagct gcaagacgtt gtaaccaga
24301 atgctcaagc attaaacaca ctgttaaac aacttagctc taattttggt gcaatttcaa
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24421 ggtaattac aggcagactt caaagccttc aaacctatgt aacacaaca ctaatcaggg
24481 ctgctgaaat cagggcttct gctaactttg ctgctactaa aatgtctgag tgtgttctg
24541 gacaatcaaa aagagttgac tttgtggaa agggctacca ccttatgtcc ttcccacaag
24601 cagccccgca tgggtgtgtc ttctacatg tcacgtatgt gccatcccag gagaggaact
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24721 ttgtgtttaa tggcacttct tggtttatta cacagaggaa ctcttttct ccacaataa
24781 ttactacaga caatacattt gtctcaggaa attgtgatgt cgttattggc atcattaaca
24841 acacagtta tgatcctctg caacctgagc ttgactcatt caaagaagag ctggacaagt

FIGURE 8 I

24901 acttcaaaaa tcatacatca ccagatgttg atcttggcga catttcaggc attaacgctt
24961 ctgtcgtcaa cattcaaaaa gaaattgacc gcctcaatga ggctcgctaaa aatttaaatg
25021 aatcactcat tgaccttcaa gaattgggaa aatatgagca atatattaaa tggccttgg
25081 atgtttggct cggcttcatt gctggactaa ttgccatcgt catggttaca atcttgctt
25141 gttgcatgac tagttgttgc agttgcctca aggggtgcatg ctcttgttgt tcttctgca
25201 agtttgatga ggatgactct gagccagttc tcaagggtgt caaattacat tacacataaa
25261 cgaacttatg gatttgitta tgagatttt tactcttaga tcaattactg cacagccagt
25321 aaaaattgac aatgcttctc ctgcaagtac tgttcagtct acagcaacga taccgtaca
25381 agcctcactc cctttcggat ggcttgttat tggcgttgca ttcttctgtg ttttcagag
25441 cgctacaaaa ataattgcgc tcaataaaaag atggcagcta gccctttata agggcttcca
25501 gtccatttgc aatttactgc tgctattgt taccatctat tcacatctt tgcctgtcgc
25561 tgcaggatg gaggcgcaat tttgtacct ctatgccttg atatatttc tacaatgcat
25621 caacgcatgt agaattatta tgagatgttg gcttgttgg aagtgcgaat ccaagaaccc
25681 attactttat gatgccaaact acttgtttg ctggcacaca cataactatg actactgtat
25741 accatataac agtgcacag atacaattgt cgttactgaa ggtgacggca ttcaacacc
25801 aaaactcaaa gaagactacc aaattgtgg ttattctgag gataggcact caggtgttaa
25861 agactatgic gttgtacatg gctatttcac cgaagttaac taccagcttg agtctacaca
25921 aattactaca gacactggta ttgaaaatgc tacattcttc atcttaaca agcttgttaa
25981 agaccacccg aatgtgcaaa tacacacaat cgacggctct tcaggagtig ctaatccagc
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26101 aagtgagtac gaacttatgt actcattcgt ttcggaagaa acaggtacgt taatagttaa
26161 tagcgtacti tttttcttg ctctcgtgtt attcttcta gtcacactag ccatccttac
26221 tgcgcttga ttgtgtcgt actgtgcaa tattgttaac gtgagttag taaaaccaac
26281 ggtttactgc tactcgcgtg ttaaaaatct gaactcttct gaaggagtgc ctgatctct
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26401 gcagacaacg gtactattac cgttaggag cttaacaac tcttgaaca atggaacct
26461 gtaatagggt tcctattctt agcctggatt atgttactac aatttcctta ttctaactgg
26521 aacaggtttt tgcataaat aaagcttgti ttcctctggc tcttgtggcc agtaacactt
26581 gcttgttttg tgcctgtgc tgctacaga attaatggg tgactggcgg gattgcgatt
26641 gcaatggctt gtatttagg ctgtatgttg cttagctact tcttgcctc ctccaggctg
26701 tttgtcgtga cccgtcctat gtgtcattc aaccagaaa caaacattct tctaatgtg
26761 cctctccggg ggacaattgt gaccagaccg ctcatggaaa gtgaactgt cattgtgtct
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26941 gcgtcgagc gtgtaggcac tgattcaggt tttgtgcat acaaccgta ccgtattgga
27001 aactataaat taaatacaga ccacgccgt agcaacgaca atattgctt gctagtacag
27061 taagtacaa cagatgttc atctgttga ctccaggtt acaatagcag agatattgat
27121 tatcattatg aggacttica ggattgctat ttggaactt gacgtataa taagtcaat
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27241 acctatggag ttgattatc cataaaacga acatgaaaat tattctctc ctgacattga
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27361 tactaaaaga acctgcccc tcaggaacat acgagggcaa taccattt caccctctg
27421 ctgacaataa atttgcacta acttgcacta gcacacacti tgcctttgct tgtgctgacg
27481 gtactcgaca tacctatcag ctgcgtgcaa gatcagttc accaaaacti ttcacagac
27541 aagaggaggt tcaacaagag ctctactgc cacttttct cattgttgc gctctagtat
27601 ttttaact ttgcttacc attaagagaa agacagaatg aatgagctca cttaattga
27661 ctctatttg tcttttag ctttctgct attcctgtt ttaataatgc ttattatatt
27721 ttggtttca ctgaaatcc aggatctaga agaacttgt accaaagtct aaacgaacat
27781 gaaacttctc attgtttga ctgtattc tctatcagt tgcattgca ctgtagtaca
27841 gcgctgtgca tctaataaac ctcatgtct tgaagatcct tgaaggtag aacactaggg
27901 gtaatactta tagcactgct tggcttttg ctctaggaaa ggttttacct tttcatagat
27961 ggcacactat ggttcaaca tgcacaccta atgttactat caactgtcaa gatccagctg

FIGURE 8 J

28021 gtggtgcgct tatagctagg tgttggtacc ttcataagg tcacaaact gctgcattha
28081 gagacgtact tgttgtttta aataaacgaa caaattaaaa tgtctgataa tggaccccaa
28141 tcaaaccaac gtagtgcccc ccgcattaca ttggtggac ccacagattc aactgacaat
28201 aaccagaatg gaggacgcaa tggggcaagg ccaaacagc gccgaccca aggtttacc
28261 aataatactg cgtcttggtt cacagctctc actcagcatg gcaaggagga acttagattc
28321 cctcagggcc agggcggtcc aatcaacacc aatagtggc cagatgacca aattggctac
28381 taccgaagag ctaccgacg agttcgtgtt ggtgacggca aaatgaaaga gtcagcccc
28441 agatggtact tctattacct aggaactggc ccagaagctt cacttccta cggcgctaac
28501 aaagaaggca tcgtatgggt tgcaactgag ggagcctga atacaccaa agaccacatt
28561 ggcacccgca atcctaataa caatgctgcc accgtgctac aattcctca aggaacaaca
28621 ttgcaaaaag gcttctacgc agagggaagc agaggcgga gtaagcctc ttctcgtcc
28681 tcatcagta gtcgcgttaa ttcaagaaat tcaactcctg gcagcagtag gggaaattc
28741 cctgctcgaa tggctagcgg aggtgtgtga actgccctcg cgctattgct gctagacaga
28801 ttgaaccagc ttgagagcaa agtttctgtt aaaggccaac aacaacaagg ccaactgtc
28861 actaagaaat ctgctgctga ggcactctaa aagcctgcc aaaaacgtac tgccacaaa
28921 cagtacaacg tcaactaacg atttgggaga cgtggtccag aacaaacca aggaaattc
28981 ggggaccaag acctaactag acaaggaact gattacaac attggccgca aattgcacaa
29041 ttgtctcaa gtgcctctgc attctttgga atgtcacgca ttggcatgga agtcacact
29101 tcgggaacat ggctgactta tcatggagcc attaaattgg atgacaaaga tccacaattc
29161 aaagacaacg tcatactgct gaacaagcac attgacgcat acaaacatt cccaccaaca
29221 gagcctaaaa aggacaaaaa gaaaaagact gatgaagctc agcctttgcc gcagagacaa
29281 aagaagcagc cactgtgac tcttctcct gcggctgaca tggatgattt ctccagacaa
29341 cttcaaaatt ccatgagtgg agcttctgct gattcaactc aggcataaac actcatgatg
29401 accacacaag gcagatgggc tatgtaaacg tttcgaat tccgtttacg atacatagtc
29461 tactttgtg cagaatgaat tctcgtact aaacagcaca agtaggttta gttacttta
29521 atctacata gcaatcttta atcaatgtgt aacattaggg aggactgaa agagccacca
29581 catttcattc gaggccacgc ggagtacgat cgagggtaca gtgaataatg ctaggagag
29641 ctgctatat ggaagagccc taatgtgtaa aattaatttt agtagtgcta tccccatgtg
29701 attttaatag ctcttagga gaatgacaaa aaaaaaaaaa aaaaaaaaaa a

FIGURE 9A

1	ctacccagga	aaagccaacc	aacctcgatc	tctttagat	ctgttctcta	aacgaacttt
61	aaaatctgtg	tagctgtcgc	tcggtgcat	gcctagtga	cctacgcagt	ataaacaata
121	ataaatttta	ctgtcgttga	caagaaacga	gtaactcgtc	cctcttctgc	agactgctta
181	cgttttcgtc	cgtgttgag	tcgatcatca	gcatacctag	gtttcgtccg	ggtgtgaccg
241	aaaggtaaga	tggagagcct	tgttcttggg	gtcaacgaga	aaacacacgt	ccaactcagt
301	ttgcctgtcc	ttcagggttag	agacgtgcta	gtgcgtggct	tcggggactc	tgtggaagag
361	gccctatcgg	aggcacgtga	acacctcaaa	aatggcactt	gtggtctagt	agagctggaa
421	aaaggcgtag	tgccccagct	tgaacagccc	tatgtgttca	ttaaacgttc	tgatgcctta
481	agcaccaatc	acggccacaa	ggtcgttgag	ctgggtgag	aaatggacgg	cattcagtag
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601	taccgcaatg	ttcttcttcg	taagaacggg	aataagggag	ccggtggtca	tagctatggc
661	atcgatctaa	agtcttatga	cttaggtgac	gagcttggca	ctgatcccat	tgaagattat
721	gaacaaaact	ggaacactaa	gcatggcagt	ggtgcactcc	gtgaactcac	tcgtgagctc
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901	caacttgatt	acatcgagtc	gaagagaggt	gtctactgct	gccgtgacca	tgagcatgaa
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1381	attggacctg	agcatagtgt	tgcagattat	cacaaccact	caaacattga	aactcgactc
1441	cgcaaggagg	gtaggactag	atgttttgga	ggctgtgtgt	ttgcctatgt	tggctgctat
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1561	attactgggtg	acaatgtgga	gaccttgaa	gaggatctcc	ttgagatact	gagtcgtgaa
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1921	tcaattcctg	atttgcaaa	agcagctgtc	accatacttg	atggtatttc	tgaacagtca
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2341	gcaaagtgtc	gatcactcaa	cttaggtgaa	gtcttcatcg	ctcaaagcaa	gggactttac
2401	cgtcagtgtg	tacgtggcaa	ggagcagctg	caactactca	tgctctttaa	ggcaccacaa
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2641	caatactgcg	cattgtctcc	tgggtttactg	gtacaaaaca	atgtctttcg	cttaaaaggg
2701	ggtgcaccaa	ttaaagggtg	aacctttgga	gaagatactg	tttgggaagt	tcaaggttac
2761	aagaatgtga	gaatcacatt	tgagcttgat	gaacgtgttg	acaaagtgtc	taatgaaaag
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2941	cttgatgagt	ggagtgtagc	tacattctac	ttatttgatg	atgctgggtg	agaaaacttt
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3061	tgtgaggaag	aagaaattga	tgaacacctg	gaacatgagt	acggtagaga	ggatgattat
3121	caaggctctc	ctctggaatt	tgggtgcctca	gctgaaacag	ttcgagttga	ggaagaagaa
3181	gaggaagact	ggctggatga	tactactgag	caatcagaga	ttgagccaga	accagaacct
3241	acacctgaag	aaccagttaa	tcagtttact	ggttatttaa	aacttactga	caatgttgcc
3301	attaaatgtg	ttgacatcgt	taaggaggca	caaagtgtca	atcctatggt	gattgtaaat
3361	gctgctaaca	tacacctgaa	acatggtggt	ggtgtagcag	gtgcactcaa	caaggcaacc
3421	aatggtgcca	tgcaaaagga	gagtgtgat	tacattaagc	taaatggccc	tcttacagta
3481	ggagggtctt	gtttgctttc	tggacataat	cttgctaaga	agtgtctgca	tggtgttgga
3541	cctaacctaa	atgcaggtag	ggacatccag	cttcttaagg	cagcatatga	aaatttcaat
3601	tcacaggaca	tcttacttgc	accattgttg	tcagcaggca	tatttggtgc	taaaccactt

FIGURE 9B

3661	cagtcttttac	aagtgtgcgt	gcagacgggt	cgtacacagg	tttatattgc	agtcaatgac
3721	aaagctcttt	atgagcaggt	tgtcatggat	tatcttgata	acctgaagcc	tagagtggaa
3781	gcacctaaac	aagaggagcc	accaaacaca	gaagattcca	aaactgagga	gaaatctgtc
3841	gtacagaagc	ctgtcgatgt	gaagccaaaa	attaaggcct	gcattgatga	ggttaccaca
3901	acactggaag	aaactaagtt	tcttaccaat	aagttactct	tgtttgctga	tatcaatggg
3961	aagctttacc	atgattctca	gaacatgctt	agagggtgaag	atatgtcttt	ccttgagaag
4021	gatgcacctt	acatggtagg	tgatgtttatc	actagtgggtg	atatcacttg	tggttgaata
4081	ccctccaaaa	aggctgggtg	cactactgag	atgctctcaa	gagctttgaa	gaaagtgcc
4141	aatgagcagt	atataaccac	gtaccctgga	caaggatgtg	ctgggtatatac	acttgaggaa
4201	gctaagactg	ctcttaagaa	atgcaaatct	gcattttatg	tactaccttc	agaagcact
4261	aatgctaagg	aagagattct	aggaactgta	tcctggaatt	tgagagaaat	gcttgctcat
4321	gctgaagaga	caagaaaatt	aatgcctata	tgcatggatg	ttagagccat	aatggcaacc
4381	atccaacgta	agtataaagg	aattaaaatt	caagagggca	tcgttgacta	tggtgtccga
4441	ttcttctttt	atactagtaa	agagcctgta	gcttctatta	ttacgaagct	gaactctcta
4501	aatgagccgc	ttgtcacaat	gccaatgggt	tatgtgacac	atgggttttaa	tcttgaagag
4561	gctgcgcgct	gtatgcgttc	tcttaaagct	cctgccgtag	tgtagtatc	atcaccagat
4621	gctgttacta	catataatgg	atacctcact	tcgtcatcaa	agacatctga	ggagcacttt
4681	gtagaaacag	tttctttggc	tggtctctac	agagattggg	cctattcagg	acagcgtaca
4741	gagttaggtg	ttgaattttct	taagcgtggg	gacaaaattg	tgtaccacac	tctggagagc
4801	cccgtcgagt	ttcatcttga	cgggtgaggt	ctttcacttg	acaaactaaa	gagtcctcta
4861	ttcctgcggg	aggttaaagac	tataaaagtg	ttcacaactg	tggaacaacac	taactctccac
4921	acacagacttg	tggtatatgtc	tatgacatat	ggacagcagt	ttgggtccaac	atactgggat
4981	gggtgctgatg	ttacaaaaat	taaacctcat	gtaaatcatg	agggtaaagac	tttctttgta
5041	ctacctagtg	atgacacact	acgtagtga	gctttcgagt	actaccatac	tcttgatgag
5101	agttttcttg	gtaggtacat	gtctgcttta	aaccacacaa	agaaatggaa	atttctcaa
5161	gttgggtgggt	taacttcaat	taaatgggct	gataacaatt	gttatttgtc	tagtgtttta
5221	ttagcacttc	aacagcttga	agtcaaattc	atgcaccag	cacttcaaga	ggcttattat
5281	agagcccggtg	ctgggtgatgc	tgtaaacctt	tgtgcactca	tactcgctta	cagtaataaa
5341	actgttggcg	agcttgggtga	tgtcagagaa	actatgaccc	atcttctaca	gcattgcta
5401	ttggaatctg	caaagcgagt	tcttaatgtg	gtgtgtaaac	attgtgggtca	gaaaactact
5461	accttaacgg	gtgtagaagc	tggtgatgat	atgggtactc	tatcttatga	taatcttaag
5521	acaggtgttt	ccattccatg	tgtgtgtggg	cgtgatgcta	cacaatatct	agtacaacaa
5581	gagtcttctt	ttgttatgat	gtctgcacca	cctgctgagt	ataaattaca	gcaaggtaca
5641	ttcttatgtg	cgaatgagta	cactggtaac	tatcagtgtg	gtcattacac	tcataaact
5701	gctaaggaga	ccctctatcg	tattgacgga	gctcacctta	caaagatgtc	agagtacaaa
5761	ggaccagtga	ctgatgtttt	ctacaaggaa	acatcttaca	ctacaaccat	caagcctgtg
5821	tcgtataaac	tcgatggagt	tacttacaca	gagattgaac	caaaattgga	tggtattat
5881	aaaaaggata	atgcttacta	tacagagcag	cctatagacc	ttgtaccaac	tcaaccatta
5941	ccaaatgcga	gttttgataa	tttcaaactc	acatgttcta	acacaaaatt	tgctgatgat
6001	ttaaatcaaa	tgacaggctt	cacaaagcca	gcttcacgag	agctatctgt	cacattcttc
6061	ccagacttga	atggcgatgt	agtggtctatt	gactatagac	actattcagc	gagtttcaag
6121	aaaggtgcta	aattactgca	taagccaatt	gtttggcaca	ttaaccaggc	tacaaccaag
6181	acaacgttca	aaccaaacac	ttggtgttta	cggtgtcttt	ggagtacaaa	gccagtagat
6241	acttcaaatt	catttgaagt	tctggcagta	gaagacacac	aaggaatgga	caatcttgct
6301	tgtgaaagtc	aacaaccac	ctctgaagaa	gtagtggaaa	atcctaccat	acagaaggaa
6361	gtcatagagt	gtgacgtgaa	aactaccgaa	gttgtaggca	atgtcatact	taaaccatca
6421	gatgaagggtg	ttaaagtaac	acaagagtta	gggtcatgagg	atcttatggc	tgcttatgtg
6481	gaaaacacaa	gcattaccat	taagaaacct	aatgagcttt	cactagcctt	agggttaaaa
6541	acaattgcc	ctcatgggtat	tgctgcaatt	aatagtgttc	cttgaggtaa	aattttggct
6601	tatgtcaaac	cattcttagg	acaagcagca	attacaacat	caaattgcgc	taagagatta
6661	gcacaacgtg	tgtttaacaa	ttatatgcct	tatgtgttta	cattattggt	ccaattgtgt
6721	acttttacta	aaagtaccaa	ttctagaatt	agagcttcac	tacctacaac	tattgttaaa
6781	aatagtgtta	agagtgttgc	taaattatgt	ttggatgccg	gcattaatta	tgtgaagtca
6841	cccaaatttt	ctaaattggt	cacaatcgct	atgtggctat	tggtgttaag	tatttgctta
6901	ggttctctaa	tctgtgtaac	tgctgctttt	gggtgactct	tatctaattt	tggtgctcct
6961	tcttattgta	atggcggttag	agaattgtat	cttaattcgt	ctaacgttac	tactatggat
7021	ttctgtgaag	gttcttttcc	ttgcagcatt	tgtttaagtg	gattagactc	ccttgattct
7081	tatccagctc	ttgaaaccat	tcaggtgacg	atttcatcgt	acaagctaga	cttgacaatt
7141	ttaggtctgg	ccgctgagtg	ggttttggca	tatatgttgt	tcacaaaatt	cttttattta
7201	ttaggtcttt	cagctataat	gcaggtgttc	tttggtctatt	ttgctagtca	tttcatcagc
7261	aattcttggc	tcatgtggtt	tatcattagt	attgtacaaa	tggcacccgt	ttctgcaatg
7321	gttaggatgt	acatcttctt	tgcttctttc	tactacatat	ggaagagcta	tggtcatatc

FIGURE 9C

7381	atggatgggt	gcacctcttc	gacttgcatg	atgtgctata	agcgcaatcg	tgccacacgc
7441	gttgagtgt	caactattgt	taatggcatg	aagagatctt	tctatgtcta	tgcaaatgga
7501	ggcgtgggt	tctgcaagac	tcacaattgg	aattgtctca	attgtgacac	atcttgcaat
7561	ggtagtacat	tcattagtga	tgaagttgct	cgtgatttgt	cactccagtt	taaaagacca
7621	atcaacccta	ctgaccagtc	atcgtatatt	gttgatagtg	ttgctgtgaa	aaatggcgcg
7681	cttcacctct	actttgacaa	ggctgggtcaa	aagacctatg	agagacatcc	tctctcccat
7741	tttgtcaatt	tagacaattt	gagagctaac	aacactaaag	gttcaactgcc	tattaatgtc
7801	atagtttttg	atggcaagtc	caaactgcag	gagctcgctt	ctaagctctgc	ttctgtgtac
7861	tacagtcagc	tgatgtgcc	acctattctg	ttgcttgacc	aagctcttgt	atcagacgtt
7921	ggagatagta	ctgaagtttc	cgtaagatg	tttgatgctt	atgtcgacac	cttttcagca
7981	acttttagtg	ttcctatgga	aaaacttaag	gcacttggtg	ctacagctca	cagcgagtta
8041	gcaaaggggtg	tagcttttaga	tggtgtcctt	tctacattcg	tgctagctgc	ccgacaaggt
8101	gttgttgata	ccgatgttga	cacaaaggat	gttattgaat	gtctcaaact	ttcacatcac
8161	tctgacttag	aagtgcaggg	tgacagttgt	aacaatttca	tgctcaccta	taataaggtt
8221	gaaaacatga	cgcccagaga	tcttggcgca	tgtattgact	gtaatgcaag	gcataatcaat
8281	gccaagtag	caaaaagtca	caatgtttca	ctcatctgga	atgtaaaaga	ctacatgtct
8341	ttatctgaac	agctgcgtaa	acaaattcgt	agtgtctgcca	agaagaacaa	catacctttt
8401	agactaactt	gtgctacaac	tagacaggtt	gtcaatgtca	taactactaa	aatctcactc
8461	aagggtggta	agattgttag	tacttgtttt	aaacttatgc	ttaaggccac	attattgtgc
8521	gttcttgctg	cattggtttg	ttatatcggt	atgccagtac	atacattgtc	aatccatgat
8581	ggttacacaa	atgaaatcat	tggttacaaa	gccattcagg	atggtgtcac	ctgtgacatc
8641	atcttactctg	atgattgttt	tgcaataaaa	catgctgggt	ttgacgcag	gtttgaccag
8701	cgtgggtgggt	catacaaaaa	tgacaaaagc	tgccctgtag	tagctgctat	cattacaaga
8761	gagattgggt	tcatagtgc	tggttaccg	ggtactgtgc	tgagagcaat	caatggtgac
8821	ttcttgcat	ttctacctcg	tggttttagt	gctgttgcca	acatttgcta	cacaccttcc
8881	aaactcattg	agtatagtga	ttttgctacc	tctgcttgcg	ttcttgctgc	tgagtgtaca
8941	atcttttaagg	atgctatggg	caaactctgt	ccatattggt	atgacactaa	tttgtagag
9001	ggttctatatt	cttatagtga	gcttcgtcca	gacactcggt	atgtgcttat	ggatgggttcc
9061	atcatacagt	ttcctaacac	ttacctggag	ggttctgtta	gagtagtaac	aacttttgat
9121	gctgagtact	gtagacatgg	tacatgcgaa	aggtcagaag	taggtatttg	cctatctacc
9181	agtggtagat	gggttcttaa	taatgagcat	tacagagctc	tatcaggagt	tttctgtggt
9241	gttgatgcga	tgaatctcat	agctaaccatc	tttactcctc	ttgtgcaacc	tggtgggtgct
9301	ttagatgtgt	ctgcttcagt	agtggctgggt	ggattatttg	ccatattggt	gacttggtgct
9361	gcctactact	ttatgaaatt	cagagctgct	tttggtgagt	acaacctagt	tggtgtgct
9421	aatgcacttt	tgtttttgat	gtctttcact	atactctgtc	tgccaccagc	ttacagcttt
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9541	tcattcttgg	ctcaccttca	atggtttgcc	atgttttctc	ctattgtgcc	tttttgata
9601	acagcaatct	atgtattctg	tatttctctg	aagcactgcc	attgggtctt	taacaactat
9661	cttaggaaaa	gagtcatggt	taatggagtt	acatttagta	ccttcgagga	gggtgctttg
9721	tgtacctttt	tgctcaacaa	ggaaatgtac	ctaaaattgc	gtagcgagac	actggtgcca
9781	cttacacagt	ataacaggta	tcttgctcta	tataacaagt	acaagtattt	cagtgagacc
9841	ttagatacta	ccagctatcg	tgaagcagct	tgctgccact	tagcaaaggc	tctaaatgac
9901	tttagcaact	caggtgctga	tgttctctac	caaccaccac	agacatcaat	cacttctgct
9961	gttctgcaga	gtggttttag	gaaaatggca	ttcccgtcag	gcaaagttga	aggggtgcag
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10081	tgtccaagac	atgtcatttg	cacagcagaa	gacatgctta	atcctaacta	tgaagatctg
10141	ctcattcgca	aatccaacca	tagctttctt	gttcaggctg	gcaatgttca	acttcgtggt
10201	attggccatt	ctatgcaaaa	ttgtctgctt	aggcttaaag	ttgatacttc	taaccttaag
10261	acacccaagt	ataaatttgt	ccgtatccaa	cctgggtcaa	cattttcagt	tctagcatgc
10321	tacaatgggt	caccatctgg	tgtttatcag	tgtgccatga	gacctaatca	taccattaaa
10381	ggttctttcc	ttaatggatc	atgtggtagt	gttggtttta	acattgatta	tgattgctg
10441	tctttctgct	atatgcatca	tatggagctt	ccaacaggag	tacacgtggg	tactgactta
10501	gaaggtaaat	tctatgggtcc	atgtgttgac	agacaaaactg	cacaggctgc	aggtacagac
10561	acaaccataa	cattaaatgt	tttggcatgg	ctgtatgctg	ctgttatcaa	tggtgatagg
10621	tggtttctta	atagattcac	cactactttg	aatgacttta	acctgtgggc	aatgaagtac
10681	aactatgaac	ctttgacaca	agatcatggt	gacatattgg	gacctcttcc	tgctcaaaaa
10741	ggaaatgccg	tcttagatat	gtgtgctgct	ttgaaagagc	tgctgcagaa	tggtatgaat
10801	ggcgtgata	tccttggtag	cactatttta	gaagatgagt	ttacaccatt	ttaggttgggt
10861	agacaatgct	ctggtgttac	cttccaagggt	aagttcaaga	aaattgttaa	gggcactcat
10921	cattggatgc	ttttaacttt	cttgacatca	ctattgattc	ttgttcaaaag	tacacagtgg
10981	tcactgtttt	tctttgttta	cgagaatgct	ttcttgccat	ttactcttgg	tattatggca
11041	attgctgcat	gtgctatgct	gcttggttaag	cataagcacg	cattcttggg	cttgtttctg

FIGURE 9D

11101	ttaccttctc	ttgcaacagt	tgcttacttt	aatatggtct	acatgcctgc	tagctgggtg
11161	atgcgtatca	tgacatggct	tgaattggct	gacactagct	tgtctggtta	taggcttaag
11221	gatttgtgta	tgtatgcttc	agctttagtt	ttgcttattc	tcatgacagc	tgcactggt
11281	tatgatgatg	ctgctagacg	tgtttggaca	ctgatgaatg	tcattacact	tgtttacaaa
11341	gtctactatg	gtaatgcttt	agatcaagct	atttccatgt	gggccttagt	tatttctgta
11401	acctctaact	attctgggtg	cgttacgact	atcatgtttt	tagctagagc	tatagtgttt
11461	gtgtgtgttg	agtattaccc	attgttattt	attactggca	acaccttaca	gtgtatcatg
11521	cttgttttatt	gtttcttagg	ctattgttgc	tgtcgctact	ttggcctttt	ctggtttactc
11581	aaccgttact	tcaggcttac	tcttgggtgt	tatgactact	tggctctctac	acaagaattt
11641	aggtatatga	actcccaggg	gcttttgctt	cctaagagta	gtattgatgc	tttcaagctt
11701	aacattaagt	tgttgggtat	tggaggtaaa	ccatgtatca	aggttgctac	tgtacagtct
11761	aaaatgtctg	acgtaaagtg	cacatctgtg	gtactgctct	cggttcttca	acaacttaga
11821	gtagagtcac	cttctaaatt	gtgggcacaa	tgtgtacaac	tcacacaatga	tattcttctt
11881	gcaaaagaca	caactgaagc	tttcgagaag	atggtttctc	ttttgtctgt	tttgcctatcc
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12001	cttcaggcta	ttgcttcaga	atttagttct	ttaccatcat	atgccgctta	tgccactgcc
12061	caggaggcct	atgagcaggc	tgtagcta	ggtgattctg	aagtcgttct	caaaaagtta
12121	aagaaatctt	tgaatgtggc	taaactctgag	tttgaccgtg	atgctgccat	gcaacgcaag
12181	ttggaaaaga	tggcagatca	ggctatgacc	caaagtaca	aacaggcaag	atctgaggac
12241	aagagggcaa	aagtaactag	tgctatgcaa	acaatgctct	tcactatgct	taggaagctt
12301	gcaaatgatg	cacttaacaa	cattatcaac	aatgcgcgtg	atggttgtgt	tgcactcaac
12361	atcataccat	tgactacagc	agccaaactc	atggttgttg	tccttgatta	tggtagctac
12421	aagaacactt	gtgatggtaa	cacctttaca	tatgcactctg	cactctggga	aatccagcaa
12481	gttgttgatg	cggatagcaa	gattgttcaa	cttagtgaaa	taacatgga	caattcacca
12541	aatttggtct	ggcctcttat	tgttacagct	ctaagagcca	actcagctgt	taaactacag
12601	aataatgaac	tgagtcagct	agcactacga	cagatgtcct	gtgcggctgg	taccacacaa
12661	acagcttgta	ctgatgacaa	tgcacttgcc	tactataaca	attcgaaggg	aggtaggttt
12721	gtgctggcat	tactatcaga	ccaccaagat	ctcaaaggg	ctagattccc	taagattgat
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12901	atggtgctgg	gcagtttagc	tgtacagta	cgtcttcagg	ctggaaatgc	tacagaagta
12961	cctgccaatt	caactgtgct	ttccttctgt	gcttttgcag	tagaccctgc	taaagcatat
13021	aaggattacc	tagcaagtgg	aggacaacca	atcaccact	gtgtgaagat	gttgtgtaca
13081	cacactggta	caggacaggc	aattactgta	acaccagaag	ctaactgga	ccaagagctc
13141	tttgggtggg	cttcatgttg	tctgtattgt	agatgccaca	ttgaccatcc	aaatcctaaa
13201	ggattctgtg	acttgaaagg	taagtacgtc	caaataccta	ccacttgtgc	taatgacca
13261	gtgggtttta	cacttagaaa	cacagtctgt	accgtctgcg	gaatgtggaa	aggttatggc
13321	tgtagtgtg	accaactccg	cgaacccttg	atgcagtctg	cggatgcac	aacgttttta
13381	aacgggtttg	cgggtgtaagt	gcagcccgct	ttacaccgtg	cggcacaggc	actagtagctg
13441	atgtcgtcta	cagggtcttt	gatatttaca	acgaaaaagt	tgctgggttt	gcaaagttcc
13501	taaaaaactaa	ttgctgtcgc	ttccaggaga	aggatgagga	aggcaattta	ttagactctt
13561	actttgtagt	taagaggcat	actatgtcta	actaccaaca	tgaagagact	atttataact
13621	tggttaaaga	ttgtccagcg	gttgcgtgcc	atgacttttt	caagtttaga	gtagatgggtg
13681	acatggtacc	acatatatca	cgtcagcgtc	taactaaata	cacaatggct	gatttagtct
13741	atgctctacg	tcattttgat	gagggttaatt	gtgatacatt	aaaagaaata	ctcgtcacat
13801	acaattgctg	tgatgatgat	tatttcaata	agaaggattg	gtatgacttc	gtagagaatc
13861	ctgacatctt	acgcgtatat	gctaacttag	gtgagcgtgt	acgccaatca	ttattaaaga
13921	ctgtacaatt	ctgcgatgct	atgcgtgatg	caggcattgt	aggcgtactg	acattagata
13981	atcaggatct	taatgggaac	tggtagcatt	tccgtgattt	cgtacaagta	gcaccaggct
14041	gcggagttcc	tattgtggat	tcatattact	cattgctgat	gcccatcctc	actttgacta
14101	gggcattggc	tgcgtagttc	catatggatg	ctgatctcgc	aaaaccactt	attaagtggg
14161	atttgctgaa	atatgatttt	acggaaagaga	gactttgtct	cttcgaccgt	tattttaaat
14221	attggggacca	gacataccat	cccaattgta	ttactgttt	ggatgatagg	tgtatccttc
14281	attgtgcaaa	ctttaatgtg	ttattttcta	ctgtgtttcc	acctacaagt	tttggaccac
14341	tagtaagaaa	aatatttgta	gatggtgttc	cttttggtgt	ttcaactgga	taccattttc
14401	gtgagttagg	agtcgtacat	aatcaggatg	taaacttaca	tagctcgcgt	ctcagtttca
14461	aggaactttt	agtgtatgct	gctgatccag	ctatgcacgc	agcttctggc	agtttttgc
14521	tagataaacg	cactacatgc	ttttcagtag	ctgcactaac	aaacaatggt	gcttttcaaa
14581	ctgtcaaacc	cggtaatttt	aataaagact	tttatgactt	tgctgtgtct	aaaggtttct
14641	ttaaggaagg	aagttctggt	gaactaaaac	acttcttctt	tgctcaggat	ggcaacgctg
14701	ctatcagtga	ttatgactat	tatcgttata	atctgccaac	aatgtgtgat	atcagacaac
14761	tcctattcgt	agttgaagtt	gttgataaat	actttgattg	ttacgatggt	ggctgtatta

FIGURE 9E

14821	atgccaaacca	agtaatcgtt	aacaatctgg	ataaatcagc	tggtttccca	tttaataaat
14881	ggggtaaggc	tagactttat	tatgactcaa	tgagttatga	ggatcaagat	gcacttttcg
14941	cgtatactaa	gcgtaatgtc	atccctacta	taactcaa	gaatcttaag	tatgccatta
15001	gtgcaaagaa	tagagctcgc	accgtagctg	gtgtctctat	ctgtagtact	atgacaaata
15061	gacagtttca	tcagaaatta	ttgaagtcaa	tagccgccac	tagaggagct	actgtggtaa
15121	ttggaacaag	caagttttac	gggtggctggc	ataatatgtt	aaaaactgtt	tacagtgatg
15181	tagaaactcc	acaccttatg	gggtgggatt	atccaaaatg	tgacagagcc	atgcctaaca
15241	tgcttaggat	aatggcctct	cttgttcttg	ctcgcaaaca	taacacttgc	tgttaacttat
15301	cacaccgttt	ctacagggtta	gctaaccgagt	gtgcgcaagt	attaagttag	atggctcatgt
15361	gtggcggctc	actatatgtt	aaaccagggtg	gaacatcatc	cggtagtgct	acaactgctt
15421	atgctaatag	tgtctttaac	atgtgtcaag	ctgttacagc	caatgtaaat	gcacttcttt
15481	caactgatgg	taataagata	gctgacaagt	atgtccgcaa	tctacaacac	aggctctatg
15541	agtgtctcta	tagaaatagg	gatgttgatc	atgaattcgt	ggatgagttt	tacgcttacc
15601	tgcgtaaaaca	tttctccatg	atgattcttt	ctgatgatgc	cgttgtgtgc	tataacagta
15661	actatgcggc	tcaagggttta	gtagctagca	ttagaactt	taaggcagtt	ctttattatc
15721	aaaataatgt	gttcatgtct	gaggcaaaat	gttggactga	gactgacctt	actaaaggac
15781	ctcacgaatt	ttgctcacag	catacaatgc	tagttaaaca	aggagatgat	tacgtgtacc
15841	tgctttaccc	agatccatca	agaatattag	gcgcaggctg	ttttgtcgat	gatattgtca
15901	aaacagatgg	tacacttatg	attgaaaggt	tctgtgctact	ggctattgat	gcttaccac
15961	ttacaaaaca	tcctaatacag	gagtatgctg	atgtctttca	cttgtattta	caatacatta
16021	gaaagttaaca	tgatgagctt	actggccaca	gtttggacat	gtattccgta	atgtaacta
16081	atgataaacac	ctcacgggtac	tgggaacctg	agttttatga	ggctatgtac	acaccacata
16141	cagtcttgca	ggctgttaggt	gcttgtgtat	tgtgcaattc	acagacttca	cttcggtgog
16201	gtgcctgtat	taggagacca	ttcctatgtt	gcaagtgtg	ctatgaccat	gtcatttcaa
16261	catcacacaa	attagtgttg	tctgttaatc	cctatgtttg	caatgcccc	ggttgtgatg
16321	tcactgatgt	gacacaactg	tatctaggag	gtatgagcta	ttattgcaag	tcacataagc
16381	ctcccattag	ttttccatta	tgtgctaatt	gtcaggtttt	tggtttatac	aaaaacacat
16441	gtgtaggcag	tgacaatgtc	actgacttca	atgcgatagc	aacatgtgat	tggactaatg
16501	ctggcgatta	catacttgcc	aacacttgta	ctgagagact	caagcttttc	gcagcagaaa
16561	cgctcaaagc	cactgaggaa	acattttaagc	tgtcatatgg	tattgccact	gtacgcgaag
16621	tactctctga	cagagaattg	catctttcat	gggagggttg	aaaacctaga	ccaccattga
16681	acagaaacta	tgtctttact	ggttaccgtg	taactaaaa	tagtaaaagta	cagattggag
16741	agtaacactt	tgaaaaaggt	gactatggtg	atgctgttgt	gtacagaggt	actacgacat
16801	acaagttgaa	tgttggtgat	tactttgtgt	tgacatctca	cactgtaatg	cttcttagtg
16861	cacctactct	agtgccacaa	gagcactatg	tgagaattac	tggttgttac	ccaacactca
16921	acatctcaga	tgagttttct	agcaatgttg	caaattatca	aaaggtcggc	atgcaaaagt
16981	actctacact	ccaaggacca	cctggtagtg	gtaagagtca	ttttgccatc	ggacttgctc
17041	tctattaccc	atctgctcgc	atagtgtata	cggcatgctc	tcatgcagct	ggtgatgccc
17101	tatgtgaaaa	ggcattaaaa	tatttgccca	tagataaatg	tagtagaatc	atacctgcgc
17161	gtgcgcgcgt	agagtgtttt	gataaattca	aagtgaattc	aacactagaa	cagtatgttt
17221	tctgcactgt	aaatgcattg	ccagaaacaa	ctgctgacat	tgtagtcttt	gatgaaatct
17281	ctatggctac	taattatgac	ttgagtgttg	tcaatgctag	acttcgtgca	aaacactacg
17341	tctatattgg	cgatcctgct	caattaccag	ccccccgcac	attgctgact	aaaggcacac
17401	tagaaccaga	atattttaat	tcagtgtgca	gacttatgaa	aacaataggt	ccagacatgt
17461	tccttggaac	ttgtcgccgt	tgtcctgtg	aaattgttga	cactgtgagt	gcttttagttt
17521	atgacaataa	gctaaaagca	cacaaggaga	agtcagctca	atgcttcaaa	atgttctaca
17581	aaggtgttat	tacacatgat	gtttcatctg	caatcaacag	acctcaaata	ggcgttgtaa
17641	gagaattttct	tacacgcaat	cctgcttgga	gaaaagctgt	ttttatctca	ccttataatt
17701	cacagaacgc	tgtagcttca	aaaatcttag	gattgcctac	gcagactgtt	gattcatcac
17761	agggttctga	atatgactat	gtcatattca	cacaaactac	tgaaacagca	cactcttgta
17821	atgtcaaccg	tttcaatgtg	gctatcaca	gggcaaaaa	tggcattttg	tgcataatgt
17881	ctgatagaga	tctttatgac	aaactgcaat	ttacaagtct	agaaatacca	cgtcgcaatg
17941	tggctacatt	acaagcagaa	aatgtaactg	gactttttaa	ggactgtagt	aagatcatta
18001	ctggctcttca	tcctacacag	gcacctacac	acctcagcgt	tgatataaag	ttcaagactg
18061	aaggattatg	tgttgacata	ccaggcatat	caaaggacat	gacctaccgt	agactcatct
18121	ctatgatggg	tttcaaaatg	aattaccaag	tcaatgggtta	ccctaataatg	tttatcacc
18181	gcgaagaagc	tattcgtcac	gttcgtgcgt	ggattggctt	tgatgtagag	ggctgtcatg
18241	caactagaga	tgctgtgggt	actaacctac	ctctccagct	aggattttct	acagggtgta
18301	acttagtagc	tgtaccgact	ggttatgttg	acactgaaaa	taacacagaa	ttcaccagag
18361	ttaatgcaaa	acctccacca	ggtgaccagt	ttaaacatct	tataccactc	atgtataaag
18421	gcttgccctg	gaatgtagtg	cgtattaaga	tagtacaagt	gctcagtgat	acactgaaag
18481	gattgtcaga	cagagtcgtg	ttcgtccttt	gggcgcagtg	ctttgagctt	acatcaatga

FIGURE 9F

18541	agtactttgt	caagattgga	cctgaaagaa	cgtgttgtct	gtgtgacaaa	cgtgcaactt
18601	gcttttctac	ttcatcagat	acttatgcct	gctggaatca	ttctgtgggt	tttgactatg
18661	tctataaccc	atztatgatt	gatgttcagc	agtggggctt	tacgggtaac	cttcagagta
18721	accatgacca	acattgccag	gtacatggaa	atgcacatgt	ggctagttgt	gatgctatca
18781	tgactagatg	tttagcagtc	catgagtgtc	ttgttaagcg	cgttgattgg	tctgttgaat
18841	accctattat	aggagatgaa	ctgaggggta	attctgcttg	cagaaaagta	caacacatgg
18901	ttgtgaagtc	tgcattgctt	gctgataagt	ttccagttct	tcatgacatt	ggaaatccaa
18961	aggctatcaa	gtgtgtgcct	caggctgaag	tagaatggaa	gttctacgat	gctcagccat
19021	gtagtacaaa	agcttacaaa	atagaggagc	tcttctattc	ttatgctaca	catcacgata
19081	aattcactga	tgggtgtttgt	ttgttttggg	attgtaacgt	tgatcggtac	ccagccaatg
19141	caattgtgtg	taggtttgac	acaagagtct	tgtcaaactt	gaacttacca	ggctgtgatg
19201	gtggtagttt	gtatgtgaat	aagcatgcat	tccacactcc	agctttcgat	aaaagtgcac
19261	ttactaattt	aaagcaattg	cctttctttt	actattctga	tagtccttgt	gagtcctcatg
19321	gcaaacaagt	agtgtcggat	attgattatg	ttccactcaa	atctgctacg	tgtattacac
19381	gatgcaattt	agggtgtgct	gtttgcagac	accatgcaaa	tgagtaccga	cagctattgg
19441	atgcatataa	tatgatgatt	tctgctggat	ttagcctatg	gatttacaaa	caatttgata
19501	cttataacct	gtggaataca	tttaccaggt	tacagagttt	agaaaatgtg	gcttataatg
19561	ttgttaataa	aggacacttt	gatggacacg	ccggcgaagc	acctgtttcc	atcattaata
19621	atgctgttta	cacaaaggta	gatggtattg	atgtggagat	ctttgaaaat	aagacaacac
19681	ttcctgttaa	tgttgcattt	gagctttggg	ctaagcgtaa	cattaaacca	gtgccagaga
19741	tttaagatac	caataatttg	gggtgtgata	tcgctgctaa	tactgtaatc	tgggactaca
19801	aaagagaagc	cccagcacat	gtatctacaa	taggtgtctg	cacaatgact	gacattgcca
19861	agaaacctac	tgagagtgtc	tgttcttcac	ttactgtctt	gtttgatggg	agagtggaa
19921	gacaggtaga	ccttttttaga	aacgcccgtg	atgggtgttt	aataacagaa	ggttcagtc
19981	aaggtctaac	accttcaaag	ggaccagcac	aagctagcgt	caatggagtc	acattaattg
20041	gagaatcagt	aaaaacacag	tttaactact	ttaagaaagt	agacggcatt	attcaacagt
20101	tgcctgaaac	ctactttact	cagagcagag	acttagagga	ttttaagccc	agatcacaaa
20161	tggaaactga	ctttctcgag	ctcgctatgg	atgaattcat	acagcgatat	aagctcgagg
20221	gctatgcctt	cgaacacatc	gtttatggag	atttcagtc	tggacaactt	ggcgggtcttc
20281	atttaatgat	aggcttagcc	aagcgctcac	aagattcacc	acttaaatta	gaggatttta
20341	tccctatgga	cagcacagtg	aaaaattact	tcataacaga	tgcgcaaaca	ggttcatcaa
20401	aatgtgtgtg	ttctgtgatt	gatcttttac	ttgatgactt	tgtcgagata	ataaagtcac
20461	aagatttgtc	agtgatttca	aaagtgggtc	aggttacaat	tgactatgct	gaaatttcat
20521	tcctgctttg	gtgtaaggat	ggacatgttg	aaaccttcta	cccaaaacta	caagcaagtc
20581	aagcgtggca	accaggtggt	gcgatgccta	acttgtaaca	gatgcaaaga	atgcttcttg
20641	aaaagtgtga	ccttcagaat	tatggtgaaa	atgctgttat	accaaaagga	ataatgatga
20701	atgtcgcaaa	gtataactca	ctgtgtcaat	acttaaatac	acttacttta	gctgtaccct
20761	acaacatgag	agttattcac	tttgggtgctg	gctctgataa	aggagttgca	ccaggtacag
20821	ctgtgctcag	acaatgggtg	ccaactggga	cactacttgt	cgattcagat	cttaatgact
20881	tcgtctccga	cgcagattct	actttaattg	gagactgtgc	aacagtacat	acggctaata
20941	aatgggacct	tattattagc	gatatgtatg	accctaggac	caaacatgtg	acaaaagaga
21001	atgactctaa	agaagggttt	ttcacttatc	tgtgtggatt	tataaagcaa	aaactagccc
21061	tgggtgggtc	tatagctgta	aagataacag	agcattcttg	gaatgctgac	ctttacaagc
21121	ttatgggcca	tttctcatgg	tggacagctt	ttgttacaaa	tgtaaatgca	tcatcatcgg
21181	aagcattttt	aattggggct	aactatcttg	gcaagccgaa	ggaacaaatt	gatggctata
21241	ccatgcatgc	taactacatt	ttctggagga	acacaaatcc	tatccagttg	tcttcttatt
21301	cactctttga	catgagcaaa	tttctcttta	aattaagagg	aactgtctga	atgtctctta
21361	aggagaatca	aatcaatgat	atgatttatt	ctcttctgga	aaaaggtagg	cttatcatta
21421	gagaaaacaa	cagagttgtg	gtttcaagtg	atattcttgt	taacaactaa	acgaacatgt
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21541	ttgatgatgt	tcaagctcct	aattacactc	aacatacttc	atctatgagg	ggggtttact
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21661	tttattctaa	tgttacaggg	tttcatacta	ttaatcatac	gtttgacaac	cctgtcatac
21721	cttttaagga	tgggtatttat	tttgcgtgcca	cagagaaatc	aaatgttgte	cgtgggtggg
21781	tttttggttc	taccatgaac	aacaagtcac	agtcggtgat	tattattaac	aattctacta
21841	atgttgttat	acgagcatgt	aactttgaat	tgtgtgacaa	ccctttcttt	gctgtttcta
21901	aacctatggg	tacacagaca	catactatga	tattcgataa	tgcatttaat	tgcatttctg
21961	agtcacatgc	tgatgccttt	tcgcttgatg	tttcagaaaa	gtcaggtaat	tttaaacact
22021	tacgagagtt	tgtgtttaaa	aataaagatg	ggtttctcta	tgtttataag	ggctatcaac
22081	ctatagatgt	agttcgtgat	ctaccttctg	gttttaacac	tttgaaacct	atttttaagt
22141	tgctctcttg	tattaacatt	acaaatttta	gagccattct	tacagccttt	tcacctgtct
22201	aagacacttg	gggcacgtca	gctgcagcct	attttgttgg	ctattttaag	ccaactacat

FIGURE 9G

22261	ttatgctcaa	gtatgatgaa	aatgggtacaa	tcacagatgc	tgttgattgt	tctcaaaatc
22321	cacttgctga	actcaaatgc	tctgtttaaga	gctttgagat	tgacaaagga	atttaccaga
22381	cctctaattt	caggggtgtt	ccctcaggag	atggtgtgag	attccctaata	attacaaaact
22441	tgtgtccttt	tggagaggtt	tttaatgcta	ctaaattccc	ttctgtctat	gcatgggaga
22501	gaaaaaaaaat	ttctaattgt	gttgcgtgatt	actctgtgct	ctacaactca	acattttttt
22561	caaccttttaa	gtgctatggc	gtttctgccca	ctaagttgaa	tgatctttgc	ttctccaatg
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22681	ctgggtgttat	tgctgattat	aattataaat	tgccagatga	tttcatgggt	tgtgtccttg
22741	cttggaatac	taggaacatt	gatgctactt	caactggtaa	ttataattat	aaatataggt
22801	atcttagaca	tggcaagctt	aggccctttg	agagagacat	atctaattgtg	cctttctccc
22861	ctgatggcaa	accttgcacc	ccacctgctc	ttaattgtta	ttggccatta	aatgattatg
22921	gttttttacac	cactactggc	attgggtacc	aaccttacag	agttgtagta	ccttcttttg
22981	aactttttaa	tgcaccggcc	acggtttgtg	gacccaaatt	atccactgac	cctattaaga
23041	accagtgtgt	caattttaat	tttaatggac	tcactggtac	tggtgtgtta	actccttctt
23101	caaagagatt	tcaaccattt	caacaatttg	gccgtgatgt	ttctgatttc	ttctgattccg
23161	ttcgagatcc	taaaacatct	gaaatattag	acatttcacc	ttgctctttt	gggggtgtaa
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23341	attctactgg	aaacaatgta	ttccagactc	aagcaggctg	tcttatagga	gctgagcatg
23401	tcgacacttc	ttatgagtgc	gacattccta	ttggagctgg	catttgtgct	agttaccata
23461	cagtttcttt	attacgtagt	attagccaaa	aatctattgt	ggcttatact	atgtctttag
23521	gtgctgatag	ttcaattgct	tactctaata	acaccattgc	tatacctact	aacttttcaa
23581	ttagcattac	tacagaagta	atgcctgttt	ctatggctaa	aacctccgta	gattgtaata
23641	tgtacatctg	cggagattct	actgaatgtg	ctaatttgct	tctccaatat	ggtagctttt
23701	gcacacaact	aaatcgtgca	ctctcaggta	ttgctgctga	acaggatcgc	aacacacgtg
23761	aagtgttcgc	tcaagtcaaa	caaatgtaca	aaaccccaac	tttgaaatat	tttgggtggt
23821	ttaatttttc	acaaatatta	cctgacctc	taagaccaac	taagaggtct	tttatggagg
23881	acttgctctt	taataagggtg	acactcgctg	atgctggctt	catgaagcaa	tatggcgaaat
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24001	tgttgccacc	tctgctcact	gatgatatga	ttgctgccta	cactgctgct	ctagttagtg
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24301	acacacttgt	taaacaactt	agctctaatt	ttggtgcaat	ttcaagtgtg	ctaaatgata
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24421	gacttcaaag	ccttcaaacc	tatgtaacac	aacaactaat	cagggctgct	gaaatcaggg
24481	cttctgctaa	tcttgctgct	actaaaatgt	ctgagtgtgt	tcttgacaa	tcaaaaagag
24541	ttgacttttg	tggaaaaggc	taccacctta	tgtccttccc	acaagcagcc	ccgcattggtg
24601	ttgtcttctc	acatgtcacg	tatgtgccat	cccaggagag	gaacttcacc	acagcgccag
24661	caatttgtca	tgaaggcaaa	gcatacttcc	ctcgtgaagg	tgtttttgtg	tttaattggca
24721	cttcttggtt	tattacacag	aggaaacttct	tttctccaca	aataattact	acagacaata
24781	catttgtctc	aggaaattgt	gatgtcgtta	ttggcatcat	taacaacaca	gtttatgatc
24841	ctctgcaacc	tgagcttgac	tcattcaaag	aagagctgga	caagtacttc	aaaaatcata
24901	catcaccaga	tgttgatctt	ggcgacattt	caggcattta	cgcttctgtc	gtcaacattc
24961	aaaaagaaat	tgaccgcctc	aatgaggtcg	ctaaaaattt	aaatgaatca	ctcattgacc
25021	ttcaagaatt	gggaaaaatat	gagcaatata	ttaaatggcc	ttggtatgtt	tggctcggct
25081	tcattgctgg	actaattgcc	atcgctcatgg	ttacaatctt	gctttgttgc	atgactagtt
25141	gttgacgttg	cctcaagggt	gcatgctctt	gtggttcttg	ctgcaagttt	gatgaggatg
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25261	gtttatgaga	ttttttactc	ttggatcaat	tactgcacag	ccagtaaaaa	ttgacaatgc
25321	ttctcctgca	agtactgttc	atgctacagc	aacgataccg	ctacaagcct	ctaccctttt
25381	cggatggcct	gttattggcg	ttgcatttct	tgctgttttt	cagagcgcta	ccaaaaataat
25441	tgcgctcaat	aaaagatggc	agctagccct	ttataagggc	ttccagttca	tttgcaattt
25501	actgctgcta	tttgttacca	tctattcaca	tcttttgctt	gtcgctgcag	gtatggaggc
25561	gcaatttttg	tacctctatg	ccttgatata	ttttctacaa	tgcatcaacg	catgtagaat
25621	tattatgaga	tgttggcttt	gttgggaagt	caaataccaag	aaccatttac	tttatgatgc
25681	caactacttt	gtttgctggc	acacacataa	ctatgactac	tgtataccat	ataacagtgt
25741	cacagataca	attgtcgtta	ctgaagggtga	cggcatttca	acacaaaaac	tcaagaaga
25801	ctaccaaatt	ggtgggttatt	ctgaggatag	gcactcaggt	gttaaagact	atgtcgttgt
25861	acatggctat	ttcaccgaag	tttactacca	gcttgagtct	acacaaatta	ctacagacac
25921	tggtattgaa	aatgctacat	tcttcatctt	taacaagctt	gttaaagacc	caccgaatgt

FIGURE 9H

25981	gcaaatcacac	acaatcgacg	gctcttcagg	agttgcta	ccagcaatgg	atccaattta
26041	tgatgagccg	acgacgacta	ctagcgtgcc	tttgaagca	caagaaagt	agtacgaact
26101	tatgtactca	ttcgttttcg	aagaaacagg	tacgttaata	gttaatagcg	tacttctttt
26161	tcttgctttc	gtggtattct	tgctagtcac	actagccatc	cttactgcgc	ttcgattgtg
26221	tgcgtagtgc	tgcaatattg	ttaacgtgag	tttagtaaaa	ccaacgggtt	acgtctactc
26281	gcgtgttaaa	aatctgaact	cttctgaagg	agttcctgat	cttctgggtc	aaacgaacta
26341	actattatta	ttattctggt	tggaacttta	acattgctta	tcatggcaga	caacgggtact
26401	attaccgttg	aggagcttaa	acaactcctg	gaacaatgga	acctagta	agggttctta
26461	ttcctagcct	ggattatggt	actacaattt	gcctattcta	atcggaacag	gtttttgtac
26521	ataataaagc	ttgttttcct	ctggctcttg	tggccagtaa	cacttgcttg	ttttgtgctt
26581	gctgctgtct	acagaattaa	ttgggtgact	ggcgggattg	cgattgcaat	ggcttgtatt
26641	gtaggcttga	tgtggcttag	ctacttcggt	gcttccttca	ggctgtttgc	togtaccgcg
26701	tcaatgtggt	cattcaaccc	agaaacaaac	attcttctca	atgtgcctct	ccgggggaca
26761	attgtgacca	gaccgctcat	ggaaagtga	cttgtcattg	gtgctgtgat	cattcgtggt
26821	cacttgcgaa	tgcccgga	ctccctaggg	cgctgtgaca	ttaaggacct	gccaaaagag
26881	atcactgtgg	ctacatcacg	aacgctttct	tattacaaat	taggagcgct	gcagcgtgta
26941	ggcactgatt	cagggtttgc	tgcatacaac	cgctaccgta	ttggaaacta	taaattaaat
27001	acagaccacg	ccggtagcaa	cgacaatatt	gctttgctag	tacagtaagt	gacaacagat
27061	gtttcatctt	gttgacttcc	aggttacaat	agcagagata	ttgattatca	ttatgaggac
27121	tttcaggatt	gctatttgga	atcttgacgt	tataataagt	tcaatagtga	gacaattatt
27181	taagcctcta	actaagaaga	attattcgga	gttagatgat	gaagaacctt	tggagttaga
27241	ttatccataa	aacgaacatg	aaaattattc	tcttcctgac	attgatgtga	tttactctt
27301	gcgagctata	tcactatcag	gagtgtgtta	gaggtacgac	tgtactacta	aaagaacctt
27361	gcccatacgg	aacatacag	ggcaattcac	catttcaccc	tcttgctgac	aataaatttg
27421	cactaacttg	cactagcaca	cactttgctt	ttgcttgtgc	tgacgggtact	cgacatacct
27481	atcagctgcg	tgcaagatca	gtttcaccaa	aacttttcat	cagacaagag	gaggttcaac
27541	aagagctcta	ctcgccactt	tttctcattg	ttgctgctct	agtattttta	atactttgct
27601	tcaccattaa	gagaaagaca	gaatgaatga	gtcacttta	attgacttct	atttgtgctt
27661	tttagccttt	ctgctattcc	ttgtttta	aatgcttatt	atattttggt	tttactcga
27721	aatccaggat	ctagaagaac	cttgtacca	agtctaaacg	aacatgaaac	ttctcattgt
27781	tttgacttgt	atttctctat	gcagttgcat	acgcactgta	gtacagcgct	gtgcatctaa
27841	taaacctcat	gtgcttgaag	atccttgtaa	ggtacaacac	taggggta	acttatagca
27901	ctgcttggtc	ttgtgctcta	ggaaagggtt	taccttttca	tagatggcac	actatgggtc
27961	aaacatgcac	acctaatggt	actatcaact	gtcaagatcc	agctgggtggt	gcgcttatag
28021	ctaggtgttg	gtaccttcat	gaaggtcacc	aaactgctgc	atttagagac	gtacttgttg
28081	ttttaataaa	acgaacaaat	taaaatgtct	gataatggac	cccaatcaaa	ccaacgtagt
28141	gcccccgca	ttacatttgg	tggaccaca	gattcaactg	acaataacca	gaatggagga
28201	cgcaatgggg	caaggccaaa	acagcgccga	ccccagggtt	tacccaataa	tactgctct
28261	tggttccacg	ctctcactca	gcattggcaag	gaggaactta	gattccctcg	aggccagggc
28321	gttccaatca	acaccaatag	tggtccagat	gaccaaattg	gctactaccg	aagagctacc
28381	cgacgagttc	gtggtggtga	cggcaaaatg	aaagagctca	gccccagatg	gtacttctat
28441	tacctaggaa	ctggcccaga	agcttcactt	ccctacggcg	ctaacaaaga	aggcatcgta
28501	tgggttgcaa	ctgagggagc	cttgaataca	cccaaagacc	acattggcac	ccgcaatcct
28561	aataacaatg	ctgccaccgt	gctacaactt	cctcaaggaa	caacattgcc	aaaaggcttc
28621	tacgcagagg	gaagcagagg	cggcagtc	gcctcttctc	gctcctcatc	acgtagtgcg
28681	ggtaattcaa	gaaattcaac	tcttggcagc	agtaggggaa	attctcctgc	tcgaatggct
28741	agcggagggtg	gtgaaactgc	cctcgcgcta	ttgctgctag	acagattgaa	ccagcttgag
28801	agcaaagttt	ctggtaaagg	ccaacaacaa	caaggccaaa	ctgtcactaa	gaaatctgct
28861	gctgaggcat	ctaaaaagcc	tgcgcaaaaa	cgtactgcca	caaaacagta	caacgtcact
28921	caagcatttg	ggagacgtgg	tccagaacaa	acccaaggaa	atttcgggga	ccaagacctt
28981	atcagacaag	gaactgatta	caaacttggt	ccgcaaatg	cacaatttgc	tccaagtgc
29041	tctgtattct	ttggaatgtc	acgcattggc	attggaagtca	caccttcggg	aacattggctg
29101	acttatcatg	gagccattaa	attggatgac	aaagatccac	aattcaaaga	caacgtcata
29161	ctgctgaaca	agcacattga	cgcatacaaa	acattcccac	caacagagcc	taaaaaggac
29221	aaaaagaaaa	agactgatga	agctcagcct	ttgccgcaga	gacaaaagaa	gcagccact
29281	gtgactcttc	ttcctgcggc	tgacatggat	gatttctcca	gacaacttca	aaattccatg
29341	agtggagctt	ctgctgattc	aactcaggca	taaactactca	tgatgaccac	acaaggcaga
29401	tgggtattgt	aaacgttttc	gcaattccgt	ttacgatata	tagtctactc	ttgtgcagaa
29461	tgaattctcg	taactaaaca	gcacaagtag	gtttagttaa	ctttaatctc	acatagcaat
29521	ctttaatcaa	tgtgtaacat	tagggaggac	ttgaaagagc	caccacattt	tcatcgaggc
29581	cacgcggagt	acgatcgagg	gtacagtga	taatgctagg	gagagctgcc	tatatggaag

FIGURE 9I

29641 agccctaag tgtaaaatta attttagtag tgctatcccc atgtgatttt aatagcttct
29701 taggagaatg aaaaaaaaaa aaaaaaaaaa aaaaaa

FIGURE 10

1	tctgtgtagc	tgtcgcctcgg	ctgcatgcct	agtgcaccta	cgcagtataa	acaataataa
61	atctttactgt	cgttgacaag	aaacgagtaa	ctcgtccctc	ttctgcagac	tgcttacggt
121	ttcgtccgtg	ttgcagtcga	tcatcagcat	acctagggtt	cgctccgggtg	tgaccgaaag
181	gtaagatgga	gagccttggt	cttggtgtca	acgagaaaaac	acacgtccaa	ctcagtttgc
241	ctgtccttca	ggttagagac	gtgctagtgc	gtggcttcgg	ggactctgtg	gaagaggccc
301	tatcggaggc	acgtgaacac	ctcaaaaatg	gcacttgtgg	tctagtagag	ctggaaaaag
361	gcgtactgcc	ccagcttgaa	cagccctatg	tgttcattaa	acgttctgat	gccttaagca
421	ccaatcacgg	ccacaaggct	gttgagctgg	ttgcagaaat	ggacggcatt	cagtacgggtc
481	gtagcgggtat	aacactggga	gtactcgtgc	cacatgtggg	cgaaacccca	attgcatacc
541	gcaatgttct	tcttcgtaag	aacggtaata	agggagccgg	tggtcatagc	tatggcatcg
601	atctaaagtgc	ttatgactta	ggtgacgagc	ttggcactga	tcccattgaa	gattatgaac
661	aaaactggaa	cactaagcat	ggcagtggtg	cactccgtga	actcactcgt	gagctcaatg
721	gaggtgtagt	cactcgctat	gtcgacaaca	atcttctgtg	cccagatggg	taccctcttg
781	attgcatcaa	agattttcta	gcacgcgcgg	gcaagtcaat	gtgcactctt	tccgaacaac
841	ttgattacat	cgagtcgaag	agaggtgtct	actgctgccg	tgaccatgag	catgaaattg
901	cctgggttcac	tgagcgctct	gataagagct	gcgagcacca	gacacccttc	gaaattaaga
961	gtgccaagaa	atctgacact	ttcaaagggg	aatgcccaaa	gtttgtgttt	cctcttaact
1021	caaaagtcaa	agtcattcaa	ccacgtgttg	aaaagaaaaa	gactgagggt	ttcatggggc
1081	gtatacgctc	tgtgtaccct	gttgcactct	cacaggagtg	taacaatatg	cacttgtcta
1141	ccttgatgaa	atgtaatcat	tgcatgaag	tttcatggca	gacgtgagac	tttctgaaag
1201	ccacttgtga	acattgtggc	actgaaaatt	tagttattga	aggacctact	acatgtgggt
1261	acctacctac	taatgctgta	gtgaaaatgc	catgtcctgc	ctgtcaagac	ccagagattg
1321	gacctgagca	tagtggtgca	gattatcaca	accactcaaa	cattgaaact	cgactccgca
1381	agggaggtag	gactagatgt	tttggaggct	gtgtgtttgc	ctatgttggc	tgctataata
1441	agcgtgccta	ctgggttcct	cgtgctagt	ctgatattgg	ctcaggccat	actggcatta
1501	ctgggtgacaa	tgtggagacc	ttgaatgagg	atctccttga	gatactgagt	cgtgaacgtg
1561	ttaacattaa	cattgttggc	gatttttcatt	tgaatgaaga	ggttgccatc	atcttggcat
1621	ctttctctgc	ttctacaagt	gcctttattg	acactataaa	gagtcctgat	tacaagtctt
1681	tcaaaaccat	tgttgagtcc	tgcggt			

FIGURE 11A

1	agtgttttat	tagcacttca	acagcttgaa	gtcaaattca	atgcaccagc	acttcaagag
61	gcttattata	gagcccgtgc	tgggtgatgct	gctaaactttt	gtgcactcat	actcgcttac
121	agtaataaaa	ctgttggcga	gcttgggtgat	gtcagagaaa	ctatgaccca	tcttctacag
181	catgctaatt	tggaatctgc	aaagcgagtt	cttaatgtgg	tgtgtaaaca	ttgtggtcag
241	aaaactacta	ccttaacggg	tgtagaagct	gtgatgtata	tgggtactct	atcttatgat
301	aatcttaaga	caggtgtttc	cattccatgt	gtgtgtggtc	gtgatgctac	acaatatcta
361	gtacaacaag	agtcttcttt	tggtatgatg	tctgcaccac	ctgctgagta	taaattacag
421	caaggtagat	tcttatgtgc	gaatgagtac	actggtaact	atcagtgtgg	tcattacact
481	catataactg	ctaaggagac	cctctatcgt	attgacggag	ctcaccttac	aaagatgtca
541	gagtacaaag	gaccagtgc	tgatgttttc	tacaaggaaa	catcttacac	tacaaccatc
601	aagcctgtgt	cgtataaaact	cgatggagtt	acttacacag	agattgaacc	aaaattggat
661	gggtattata	aaaaggataa	tgcttactat	acagagcagc	ctatagacct	tgtaccaact
721	caaccattac	caaatgcgag	ttttgataat	ttcaaactca	catgttctaa	cacaaaattt
781	gctgatgatt	taaatcaaat	gacaggtctc	acaaagccag	cttcacgaga	gctatctgtc
841	acattcttcc	cagacttgaa	tggcgatgta	gtggctattg	actatagaca	ctattcagcg
901	agtttcaaga	aaggtgctaa	attactgcat	aagccaattg	tttggcacat	taaccaggct
961	acaaccaaga	caacgttcaa	accaaact	tgggtgttac	gttgtctttg	gagtacaaag
1021	ccagtagata	cttcaaattc	atttgaagtt	ctggcagtag	aagacacaca	aggaatggac
1081	aatcttgctt	gtgaaagtca	acaaccacc	tctgaagaag	tagtggaaaa	tcctaccata
1141	cagaagggaag	tcatagagt	tgacgtgaaa	actaccgaag	ttgtaggcaa	tgtcatactt
1201	aaaccatcag	atgaagggtg	taaagtaaca	caagagttag	gtcatgagga	cttaattggc
1261	gcttatgtgg	aaaacacaag	cattaccatt	aagaaaaccta	atgagctttc	actagcctta
1321	ggtttaaaaa	caattgccac	tcatgggtatt	gctgcaatta	atagtgttcc	ttggagtaaa
1381	atttttgctt	atgtcaaacc	attcttagga	caagcagcaa	ttacaacatc	aaattgcgct
1441	aagagattag	cacaacgtgt	gtttaacaat	tatatgcctt	atgtgtttac	attattgttc
1501	caattgtgta	cttttactaa	aagtaccaat	ctagaatta	gagcttcact	acctacaact
1561	attgctaaaa	atagtgttaa	gagtgttgc	aaattatggt	tggatgccgg	cttaatttat
1621	gtgaagtcac	ccaaattttc	taaattgttc	acaatcgcta	tgtggctatt	gttgtaaagt
1681	atttgcttag	gttctctaat	ctgtgttaact	gctgcttttg	gtgtactctt	atctaatttt
1741	ggtgtcctt	cttattgtaa	tggcggttaga	gaattgtatc	ttaattcgtc	taacgttact
1801	actatggatt	tctgtgaagg	ttcttttctt	tgcagcattt	gtttaagtgg	attagactcc
1861	cttgattctt	atccagctct	tgaaccatt	caggtgacga	tttcatcgta	caagctagac
1921	ttgacaattt	taggtctggc	cgctgagtg	gttttggcat	atatgttgtt	cacaaaattc
1981	ttttattttat	taggtctttc	agctataatg	caggtgttct	ttggctattt	tgctagtcac
2041	ttcatcagca	attcttggct	catgtgggtt	atcattagta	ttgtacaaat	ggcaccgctt
2101	tctgcaatgg	ttaggatgta	catcttcttt	gcttctttct	actacatatg	gaagagctat
2161	gttcatatca	tggatgggtg	cacctcttcg	acttgcacga	tgtgctataa	gcgcaatcgt
2221	gccacacgcg	ttgagtgtac	aactattgtt	aatggcatga	agagatcttt	ctatgtctat
2281	gcaaatggag	gccgtggctt	ctgcaagact	cacaattgga	attgtctcaa	ttgtgacaca
2341	ttttgactg	gtagtacatt	cattagtgtg	gaagttgttc	gtgatttgtc	actccagttt
2401	aaaagaccaa	tcaaccctac	tgaccagtca	tcgtatattg	ttgatagtgt	tgctgtgaaa
2461	aatggcgcg	ttcacctcta	ctttgacaag	gctgggtcaa	agacctatga	gagacatccg
2521	ctctcccatt	ttgtcaattt	agacaatttg	agagctaaca	acactaaagg	ttcactgcct
2581	attaatgtca	tagtttttga	tggcaagtcc	aaatgcgacg	agtctgcttc	taagtctgct
2641	tctgtgtact	acagtgcgct	gatgtgcca	cctattctgt	tgcttgacca	agctcttgta
2701	tcagacgttg	gagatagtac	tgaagtttcc	gttaagatgt	ttgatgctta	tgtcgacacc
2761	ttttcagcaa	cttttagtgt	tcctatggaa	aaacttaagg	cacttggtgc	tacagctcac
2821	agcgagttag	caaagggtgt	agcttttagat	ggtgtccttt	ctacattcgt	gtcagctgcc
2881	cgacaagggt	ttgttgatac	cgatgttgac	acaaaggatg	ttattgaatg	tctcaaactt
2941	tcacatcact	ctgacttaga	agtgcacagt	gacagttgta	acaatttcat	gctcacctat
3001	aataaggttg	aaaacatgac	gccagagat	cttggcgcat	gtattgactg	tatgcgaagg
3061	catatcaatg	cccaagtagc	aaaaagtcac	aatgtttcac	tcattctggaa	tgtaaaagac
3121	tacatgtctt	tatctgaaca	gctgcgtaaa	caaattcgta	gtgctgccaa	gaagaacaac
3181	atacctttta	gactaaactg	tgctacaact	agacaggttg	tcaatgtcat	aactactaaa
3241	atctcactca	aggggtgtaa	gattgttagt	acttgtttta	aacttatgct	taaggccaca
3301	ttattgtgcg	ttcttgctgc	attggtttgt	tatatcgta	tgccagtaca	tacattgtca
3361	ttcatgatg	gttacacaaa	tgaaatcatt	ggttacaaa	ccattcagga	tggtgtcact
3421	cgtgacatca	tttctactga	tgattgtttt	gcaaataaac	atgctgggtt	tgagcgtagg
3481	tttagccagc	gtgggtggtc	atacaaaaat	gacaaaagct	gccctgtagt	agctgctatc
3541	attacaagag	agattgggtt	catagtgcct	ggcttaccgg	gtactgtgct	gagagcaatc
3601	aatggtgact	tcttgcat	tctacctcgt	gttttttagtg	ctgttggtgaa	catttgctac

FIGURE 11B

3661	acaccttcca	aactcattga	gtatagtgat	tttgctacct	ctgcttgcg	tcttgctgct
3721	gagtgtagaa	tttttaagga	tgctatgggc	aaacctgtgc	catattgtta	tgacactaat
3781	ttgctagagg	gttctatttc	ttatagtga	cttcgtccag	acactcgtta	tgtgcttag
3841	gatgggtcca	tcatacagtt	tcctaact	tacctggagg	gttctgttag	agtagtaaca
3901	acttttgatg	ctgagtactg	tagacatgg	acatgcgaaa	ggtcagaagt	aggtatttgc
3961	ctatctacca	gtggtagatg	ggttcttaat	aatgagcatt	acagagctct	atcaggagtt
4021	ttctgtgggtg	ttgatgcat	gaatctcata	gctaacatct	ttactcctct	tgtgcaacct
4081	gtgggtgctt	tagatgtgtc	tgcttcagta	gtggctgggtg	gtattattgc	catattgggtg
4141	acttggtgctg	cctactactt	tatgaaattc	agacgtgttt	ttggtgagta	caaccattgtt
4201	gttgctgcta	atgcactttt	gtttttgatg	tctttcacta	tactctgtct	ggtaccagct
4261	tacagctttc	tgccgggagt	ctactcagtc	ttttacttgt	acttgacatt	ctatttcacc
4321	aatgatgttt	cattcttggc	tcaccttcaa	tgggttgcca	tggtttctcc	tattgtgcct
4381	ttttggataa	cagcaatcta	tgtattctgt	atttctctga	agcactgcca	ttggttcttt
4441	aacaactatc	ttaggaaaag	agtcattgtt	aatggagtta	catttagtac	cttcgaggag
4501	gctgctttgt	gtacctttt	gctcaacaag	gaaatgtacc	taaaattgcg	tagcgagaca
4561	ctggtgccac	ttacacagta	taacagggtat	cttgctctat	ataacaagta	caagtatttc
4621	agtggagcct	tagatactac	cagctatcgt	gaagcagctt	gctgccactt	agcaaaggct
4681	ctaaatgact	ttagcaactc	agggtcgtgat	gttctctacc	aaccaccaca	gacatcaatc
4741	acttctgctg	ttctgcagag	tgggttttagg	aaaatggcat	tcccgtcagg	caaagttagaa
4801	gggtgcatgg	tacaagtaac	ctgtggaact	acaactctta	atggattgtg	gttggatgac
4861	acagtatact	gtccaagaca	tgtcatttgc	acagcagaag	acatgcttaa	tcctaactat
4921	gaagatctgc	tcattcgcaa	atccaacctat	agctttcttg	ttcaggctgg	ttcaggttcaa
4981	cttcgtgtta	ttggccattc	tatgcaaaat	tgtctgctta	ggcttaaagt	tgatacttct
5041	aaccctaaga	caccaagta	taaatttgtc	cgtatccaac	ctggtcaaac	attttcagtt
5101	ctagcatgct	acaatgggtc	accatctggt	gtttatcagt	gtgccatgag	acctaatacat
5161	accattaaag	gttctttcct	taatggatca	tgtggtagtg	ttggttttaa	cattgattat
5221	gattgcgtgt	ctttctgcta	tatgcatcat	atggagcttc	caacaggagt	acacgctggt
5281	accgacttag	aaggtaaaat	ctatggtcca	ttggttgaca	gacaaaactgc	acaggctgca
5341	ggtacagaca	caaccataac	attaaatggt	ttggcatggc	tgtatgctgc	tgttatcaat
5401	ggtgatagg	ggtttcttaa	tagattcacc	actactttga	atgactttaa	ccttgtaggca
5461	atgaagtaca	actatgaacc	tttgacacaa	gatcatgttg	acatattggg	acctctttct
5521	gctcaaacag	gaattgccgt	cttagatatg	tgtgctgctt	tgaaaagagct	gctgcagaat
5581	ggtatgaatg	gtcgtactat	ccttggttagc	actatttttag	aagatgagtt	tacaccattt
5641	gatgttgtta	gacaatgctc	tggtgtttacc	ttccaaggta	agttcaagaa	aattgttaaag
5701	ggcactcatc	attggatgct	tttaactttc	ttgacatcac	tattgattct	tgttcaaagt
5761	acacagtgg	cactgttttt	ctttgtttac	gagaatgctt	tcttgccatt	tactcttggt
5821	attatggcaa	ttgctgcatg	tgctatgctg	cttggttaagc	ataagcacgc	attctgtgct
5881	ttgtttctgt	taccttctct	tgcaacagtt	gcttacttta	atatgggtcta	catgcctgct
5941	agctgggtga	tgctatcat	gacatggctt	gaattggctg	acactagctt	gtctgggtat
6001	aggcttaagg	attgtgttat	gtatgcttca	gcttttagttt	tgcttattct	catgacagct
6061	cgcactgttt	atgatgatgc	tgctagacgt	gtttggacac	tgatgaatgt	cattacactt
6121	gtttacaaag	tctactatgg	taatgcttta	gatcaagcta	tttccatgtg	ggccttagtt
6181	atttctgtaa	cctctaacta	ttctgggtgc	gttacgacta	tcatgttttt	agctagagct
6241	atagtgtttg	tgtgtgttga	gtattatcca	ttgttattta	ttactggcaa	caccttacag
6301	tgtatcatgc	ttgtttattg	tttcttaggc	tattgttgct	gctgctactt	tggccttttc
6361	tggttactca	accgttactt	cagggttact	cttgggtgtt	atgactactt	ggtctctaca
6421	caagaattta	ggtatatgaa	ctcccagggg	cttttgccctc	ctaagagtag	tattgatgct
6481	ttcaagctta	acattaagtt	gttgggtatt	ggaggtaaac	catgtatcaa	ggttgctact
6541	gtacagtcta	aaatgtctga	cgtaaagtgc	acatctgtgg	tactgctctc	ggttcttcaa
6601	caacttagag	tagagtcac	ttctaaattg	tgggcacaa	gtgtacaact	ccacaatgat
6661	attcttcttg	caaaagacac	aactgaagct	ttcgagaaga	tggtttctct	tttgtctggt
6721	ttgctatcca	tgcaagggtc	tgtagacatt	aatagggttg	gctgagaaat	gctcgataac
6781	cgtgctactc	ttcaggctat	tgcttcagaa	tttagttctt	taccatcata	tccgcttat
6841	gccactgccc	aggaggccta	tgagcaggct	gtagctaattg	gtgattctga	agtcgttctc
6901	aaaaagttaa	agaaatcttt	gaatgtggct	aaatctgagt	ttgaccgtga	tgctgccatg
6961	caacgcaagt	tggaaaagat	ggcagatcag	gctatgaccc	aaatgtacaa	acaggcaaga
7021	ctcaggagca	agagggccca	agtcgcttct	gctatgcaaa	caatgctctt	cactatgcta
7081	aggaagcttg	ataatgatgc	acttaacaac	attatcaaca	atgctgctga	tgttctggtt
7141	ccactcaaca	tcataccatt	gactacagca	gccaactca	tgggtgttgt	ccctgattat
7201	ggtacctaca	agaacacttg	tgatggtaac	acctttacat	atgcatctgc	actctgggaa
7261	atccagcaag	ttgttgatgc	ggatagcaag	attgttcaac	ttagtgaat	taacatggac
7321	aattcaccaa	atttggcttg	gcctcttatt	gttacagctc	taagagccaa	ctcagctggt

FIGURE 11C

7381	aaactacaga	ataatgaact	gagtccagta	gcactacgac	agatgtcctg	tgcggctggg
7441	accacacaaa	cagcttgtac	tgatgacaat	gcacttgcct	actataacaa	ttcgaaggga
7501	ggtaggtttg	tgctggcatt	actatcagac	caccaagatc	tcaaatgggc	tagattccct
7561	aagagtgatg	gtacaggtac	aattttacaca	gaactggaac	caccttgtag	gtttgttaca
7621	gacacaccaa	aagggcctaa	agtgaataac	ttgtacttca	tcaaaggctt	aaacaaccta
7681	aatagaggta	tgggtgctggg	cagtttagct	gctacagtac	gtcttcaggc	tggaaatgct
7741	acagaagtac	ctgccaattc	aactgtgctt	tccttctgtg	cttttgcagt	agaccctgct
7801	aaagcatata	aggattacct	agcaagtggg	ggacaaccaa	tcaccaactg	tgtgaagatg
7861	ttgtgtacac	acactggtag	aggacaggca	attactgtaa	caccagaagc	taacatggac
7921	caagagtcct	ttggtggtgc	ttcatgttgt	ctgtattgta	gatgccacat	tgaccatcca
7981	aatcctaaaag	gattctgtga	cttgaaagg	aagtacgtcc	aaatacctac	cacttgtgct
8041	aatgacccag	tgggtttttac	acttagaaac	acagtctgta	ccgtctgctg	aatgtggaaa
8101	ggttatggct	gtagtgtgta	ccaactccgc	gaacccttga	tgcagtctgc	ggatgcatca
8161	acgttttttaa	acgggtttgc	ggtgtaagt	cagcccgtct	tacaccgtgc	ggcacaggca
8221	ctagtactga	tgctgcttac	agggcttttg	atattttacaa	cgaaaaagtt	gctggttttg
8281	caaagttcct	aaaaactaat	tgctgtcgct	tccaggagaa	ggatgaggaa	ggcaattttat
8341	tagactctta	ctttgtagtt	aagaggcata	ctatgtctaa	ctaccaacat	gaagagacta
8401	tttataactt	ggttaaagat	tgtccagcgg	ttgctgtcca	tgactttttc	aagtttagag
8461	tagatggtga	catggtacca	catatatcac	gtcagcgtct	aactaaatac	acaatggctg
8521	atttagtcta	tgctctacgt	cattttgatg	agggtaattg	tgatacatta	aaagaaatac
8581	tcgtcacata	caattgctgt	gatgatgatt	atttcaataa	gaaggattgg	tatgacttcg
8641	tagagaatcc	tgacatctta	cgcgatatg	ctaacttagg	tgagcgtgta	cgccaatcat
8701	tattaaagac	tgtacaattc	tgcgatgcta	tgcgtgatgc	aggcattgta	ggcgtactga
8761	cattagataa	tcaggatctt	aatgggaact	ggtacgattt	cggtgatttc	gtacaagtag
8821	caccaggctg	cggagttcct	attgtggatt	catattactc	attgctgatg	cccatcctca
8881	ctttgactag	ggcattggct	gctgagtccc	atatggatgc	tgatctcgca	aaaccactta
8941	tttaagtggga	tttgctgaaa	tatgatttta	cggagagag	actttgtctc	ttcgaccggt
9001	attttaaata	ttgggaccag	acataccatc	ccaattgtat	taactgtttg	gatgatagg
9061	gtatccttca	ttgtgcaaac	tttaatgtgt	tattttctac	tgtgtttcca	cctacaagtt
9121	ttggaccact	agtaagaaaa	atatttgtag	atggtgttcc	ttttgttgtt	tcaactggat
9181	accattttcg	tgagtttagga	gtcgtagata	atcaggatgt	aaacttacat	agctcgcgct
9241	tcagtttcaa	ggaactttta	gtgtatgctg	ctgatccagc	tatgcatgca	gcttctggca
9301	atttattgct	agataaacgc	actacatgct	tttcagtagc	tgactaaca	aacaatggtg
9361	cttttcaaac	tgtcaaaccc	ggtaatttta	ataaagactt	ttatgacttt	gctgtgtcta
9421	aaggtttcct	taaggaagga	agttctgttg	aactaaaaca	cttcttcttt	gctcaggatg
9481	gcaacgctgc	tatcagtgat	tatgactatt	atcgttataa	tctgccaaaca	atgtgtgata
9541	tcagacaact	cctattcgta	gttgaagttg	ttgataaata	ctttgattgt	tacgatgggtg
9601	gctgtattaa	tgccaaccaa	gtaatcgtta	acaatctgga	taaatacagct	ggtttcccat
9661	ttaataaaatg	gggtaaggct	agactttatt	atgactcaat	gagttatgag	gatcaagatg
9721	cacttttctgc	gtataactaag	cgtaatgtca	tccctactat	aactcaaatg	aatcttaagt
9781	atgccattag	tgcaaagaat	agagctcgca	ccgtagctgg	tgtctctatc	tgtagtacta
9841	tgacaaatag	acagtttcat	cagaaattat	tgaagtcaat	agccgccact	agaggagcta
9901	ctgtgggtaat	tgggaacaagc	aagttttacg	gtggctggca	taatatgtta	aaaactgttt
9961	acagtgatgt	agaaaactcca	caccttatgg	gttgggatta	tccaaaatgt	gacagagcca
10021	tgccctaacat	gcttaggata	atggcctctc	ttgttcttgc	tcgcaaacat	aacacttgct
10081	gtaactttatc	acaccgtttc	tacaggttag	ctaacgagtg	tgcgcaagta	tttaagtgaga
10141	tggatcatgtg	tggcggctca	ctatatgtta	aaccagggtg	aacatcatcc	ggtgatgcta
10201	caactgctta	tgctaatagt	gtctttaaca	tttgtcaagc	tggtacagcc	aatgtaaatg
10261	cacttctttc	aactgatgg	aataagatag	ctgacaagta	tgtccgcaat	ctacaacaca
10321	ggctctatga	gtgtctctat	agaaatagg	atgttgatca	tgaattcgtg	gatgagtttt
10381	acgcttacct	gcgtaaacat	ttctccatga	tgattctttc	tgatgatgcc	gttgtgtgct
10441	ataacagtaa	ctatgcggct	caaggtttag	tagctagcat	taagaacttt	aaggcagttc
10501	tttattatca	aaataatgtg	ttcatgtctg	aggcaaaatg	ttggac	

FIGURE 12A

1	attagcgata	tgtatgaccc	taggaccaaa	catgtgacaa	aagagaatga	ctctaaagaa
61	gggtttttca	cttatctgtg	tggatttata	aagcaaaaac	tagccctggg	tggttctata
121	gctgtaaaga	taacagagca	ttcttggaat	gctgaccttt	acaagcttat	gggccatttc
181	tcatggtgga	cagcttttgt	tacaaatgta	aatgcatcat	catcggaagc	atttttaatt
241	ggggctaact	atcttggcaa	gccgaaggaa	caaattgatg	gctataccat	gcatgctaac
301	tacattttct	ggaggaacac	aaatcctatc	cagttgtctt	cctattcact	ctttgacatg
361	agcaaatttc	ctcttaaatt	aaggggaact	gctgtaatgt	ctcttaagga	gaatcaaadc
421	aatgatatga	tttattctct	tctggaaaaa	ggtaggctta	tcattagaga	aaacaacaga
481	gttgtgggtt	caagtgatat	tcttggttaac	aactaaacga	acatgtttat	tttcttatta
541	tttcttactc	tcactagtgg	tagtgacctt	gaccggtgca	ccacttttga	tgatgttcaa
601	gctcctaatt	acactcaaca	tacttcatct	atgagggggg	tttactatcc	tgatgaaatt
661	tttagatcag	acactcttta	tttaactcag	gattttatttc	ttccatttta	ttctaattgt
721	acagggtttc	atactattaa	tcatacgttt	ggcaaccctg	tcataccttt	taaggatggg
781	atattatttg	ctgccacaga	gaaatcaaat	gtgtgccgtg	gttgggtttt	tggttctacc
841	atgaacaaca	agtcacagtc	ggtgattatt	attagcaatt	ctactaatgt	tggtatacga
901	gcatgtaact	ttgaattgtg	tgacaaccct	ttctttgctg	tttctaaacc	catgggtaca
961	cagacacata	ctatgatatt	cgataatgca	tttaattgca	ctttcgagta	catatctgat
1021	gccttttcgc	ttgatgtttc	agaaaagtca	ggtaatttta	aacacttacg	agagtttgtg
1081	tttaaaaaata	aagatgggtc	tctctatggt	tataagggct	atcaacctat	agatgtagtt
1141	cgtgatctac	cttctgggtt	taacactttg	aaacctattt	ttaagttgcc	tcttgggtat
1201	aacattacaa	attttagagc	cattcttaca	gccttttcac	ctgctcaaga	catttggggc
1261	acgtcagctg	cagcctattt	tgttggctat	ttaaagccaa	ctacatttat	gctcaagtat
1321	gatgaaaatg	gtacaatcac	agatgctgtt	gattgctctc	aaaatccact	tgctgaactc
1381	aaatgctctg	ttaagagctt	tgagattgac	aaaggaattt	accagacctc	taatttccagg
1441	gttgttccct	caggagatgt	tgtgagattc	cctaataatta	caaacttgtg	tccttttggg
1501	gaggttttta	atgctactaa	attcccttct	gtctatgcat	gggagagaaa	aaaaatttct
1561	aattgtgttg	ctgattactc	tgtgctctac	aactcaacat	ttttttcaac	ttttaaagtgc
1621	tatggcggtt	ctgccactaa	gttgaatgat	ctttgcttct	ccaatgtcta	tgcagattct
1681	tttgtagtca	agggagatga	tgtaaagaaa	atagcgccag	gacaaactgg	tgttattgct
1741	gattataatt	ataaattgcc	agatgatttc	atgggttggt	tccttgcttg	gaatactggg
1801	aacattgatg	ctacttcaac	tggtaattat	gattataaat	ataggtatct	tagacatggc
1861	tagccttaggc	cctttgagag	agacatatct	aatgtgcctt	tctcccctga	tggcaaacct
1921	tgcacccac	ctgctcttaa	ttgttattgg	ccattaaatg	attatggttt	ttacaccact
1981	actggcattg	gctaccaacc	ttacagagtt	gtagtacttt	cttttgaaact	tttaaatgca
2041	ccggccacgg	tttgtggacc	aaaattatcc	actgacctta	ttaagaacca	gtgtgtcaat
2101	tttaatttta	atggactcac	tggtagtggg	gtgttaactc	cttcttcaaa	gagatttcaa
2161	ccatttcaac	aatttggccg	tgatgtttct	gatttcaactg	attccgttcg	agatcctaaa
2221	acatctgaaa	tattagacat	ttcaccttgc	tcttttgggg	gtgtaagtgt	aattacacct
2281	ggaacaaatg	cttcatctga	agtgtctggt	ctatatcaag	atgttaactg	cactgtagtt
2341	tctacagcaa	ttcatgcaga	tcaactcaca	ccagcttggc	gcatatattc	tcttggaaac
2401	aatgtattcc	agactcaagc	aggctgtctt	ataggagctg	agcatgtcga	cacttcttat
2461	gagtgcgaca	ttcctattgg	agctggcatt	tgtgctagtt	accatacagt	ttctttatta
2521	cgtagtacta	gccaaaaatc	tatttgggct	tatactatgt	ctttaggtgc	tgatagttca
2581	attgcttact	ctaataaacac	cattgtctata	cctactaact	tttcaattag	cattactaca
2641	gaagtaatgc	ctgtttctat	ggctaaaacc	tccgtagatt	gtaatatgta	catctgcgga
2701	gatttctactg	aatgtgctaa	tttgcctctc	caatatggta	gcttttgcac	acaactaaat
2761	cgtgcactct	caggtattgc	tgtgtaacag	gatcgcaaca	cacgtgaagt	gttcgctcaa
2821	gtcaaacaaa	tgtacaaaac	cccaactttg	aaatattttg	gtggttttta	tttttcacaa
2881	atattacctg	accctctaaa	gccaaactaag	aggtctttta	ttgaggactt	gccctttaat
2941	aaggtgacac	tcgctgatgc	tggcttcatg	aagcaatatg	gcgaatgcct	aggtgatatt
3001	aatgctagag	atctcatttg	tgcgcagaag	tccaatggac	ttacagtgtt	gccacctctg
3061	ctcactgatg	atatgatttg	tgcctacact	gtcgtctag	ttagtggtag	tccactgtct
3121	ggatggacat	ttgggtgctg	cgctgctctt	caaatacctt	ttgctatgca	aatggcatat
3181	agggttcaatg	gcattggagt	tacccaaaat	gttctctatg	agaacccaaa	acaaatcgcc
3241	aaccaattta	acaaggcgat	tagtcaaaat	caagaatcac	ttacaacaac	atcaactgca
3301	ttgggcaagc	tgcaagacgt	tgtaaacag	aatgctcaag	cattaaacac	acttgtaaaa
3361	caacttagct	ctaattttgg	tgcaatttca	agtgtgctaa	atgatattct	ttcgcgactt
3421	gataaagtgc	aggcggaggt	acaaaattgac	aggttaatta	caggcagact	tcaagcctt
3481	caaacctatg	taacacaaca	actaatcagg	gctgctggaa	tcagggtctc	tgctaattct
3541	gctgctacta	aaatgtctga	gtgtgttctt	ggacaatcaa	aaagagttga	cttttgtgga
3601	aagggctacc	accttatgtc	cttcccacaa	gcagccccgc	atgggtgtgt	cttcctacat

FIGURE 12B

```
3661 gtcacgtatg tgccatccca ggagaggaac ttcaccacag cgccagcaat ttgtcatgaa
3721 ggcaaagcat acttccctcg tgaagggtgtt tttgtgttta atggcacttc ttggtttatt
3781 acacagagga acttcttttc tccacaaata attactacag acaatacatt tgtctcagga
3841 aattgtgatg tcgttattgg catcattaac aacacagttt atgatcctct gcaacctgag
3901 cttgactcat tcaaagaaga gctggacaag tacttcaaaa atcatacatc accagatggt
3961 gatcttggcg acatttcagg cattaacgct tctgtcgtca acattcaaaa agaaattgac
4021 cgctcaatg aggtcgctaa aaattttaat gaatcactca ttgaccttca agaattggga
4081 aaatatgagc aatatattaa atggccttgg tatgtttggc tcggcttcat tgctggacta
4141 attgccatcg tcatggttac aatcttgctt tgttgcata ctagtgtgtg tagttgcctc
4201 aaggggtgat gctcttgtgg ttcttgctgc aagtttgatg aggatgactc tgagccagtt
4261 ctcaaggggtg tcaaattaca ttacacataa acgaacttat ggatttggtt atgagatttt
4321 ttactcttgg atcaattact gcacagccag taaaaactga caatgcttct cctgcaagta
4381 ctgttcatgc tacagcaacg ataccgtac aagcctcact ccctttcgga tggcttgta
4441 ttggcggtgc atttcttgct gtttttcaga gcgctaccaa aataattgag ctcaataaaa
4501 gatggcagct agccctttat aagggttcc agttcatttg caatttactg ctgctatttg
4561 ttaccatcta ttcacatctt ttgcttgctg ctgcaggat ggaggcgcaa ttttgtacc
4621 tctatgcctt gatatacttt ctacaatgca tcaacgcatg tagaattatt atg
```


FIGURE 13

1	aaagaacctt	gcccatacag	aacatacagag	ggcaattcac	catttcaccc	tcttgctgac
61	aataaaatttg	cactaaacttg	cactagcaca	cacttttgctt	ttgcttgctg	tgacgggtact
121	cgacatacct	atcagctgctg	tgcaagatca	gtttcaccaa	aacttttcat	cagacaagag
181	gaggttcaac	aagagctcta	ctcgccactt	tttctcattg	ttgctgctct	agtattttta
241	atactttgct	tcaccattaa	gagaaagaca	gaatgaatga	gctcacttta	attgacttct
301	atttgtgctt	tttagccttt	ctgctattcc	ttgttttaat	aatgcttatt	atatttttgg
361	tttctactga	aatccaggat	ctagaagaac	cttgtagcaa	agtctaaacg	aacatgaaac
421	ttctcattgt	tttgacttgt	atttctctat	gcagttgcat	atgcactgta	gtacagcgct
481	gtgcatctaa	taaaccctcat	gtgcttgaag	atccttgtaa	ggtacaacac	taggggtaat
541	acttatagca	ctgcttggct	ttgtgctcta	ggaaagggtt	taccttttca	tagatggcac
601	actatggttc	aaacatgcac	acctaattgt	actatcaact	gtcaagatcc	agctgggtgg
661	gcgcttatag	ctaggtgttg	gtaccttcat	gaaggctcacc	aaactgctgc	atthagagac
721	gtacttggtg	ttttaaataa	acgaacaaat	taaaatgtct	gataatggac	cccaatcaaa
781	ccaacgtagt	gcccccgca	ttacatttgg	tggaccaca	gattcaactg	acaataacca
841	gaatggagga	cgcaatgggg	caaggccaaa	acagcgccga	ccccaagggt	taccaataaa
901	tactgcgtct	tggttcacag	ctctcactca	gcatggcaag	gaggaactta	gattccctcg
961	aggccagggc	gttccaatca	acaccaatag	tgggtccagat	gaccaaattg	gctactaccg
1021	aagagctacc	cgacgagttc	gtggtggtga	cggcaaaatg	aaagagctca	gccccagatg
1081	gtacttctat	tacctaggaa	ctggcccaga	agcttcactt	ccctacggcg	ctaacaaaga
1141	aggcactgta	tgggttgcaa	ctgagggagc	cttgaataca	cccaaagacc	acattggcac
1201	ccgcaatcct	aataacaatg	ctgccaccgt	gctacaactt	cctcaaggaa	caacattgcc
1261	aaaaggcttc	tacgcagagg	gaagcagagg	cggcagtcac	gcctcttctc	gctcctcatc
1321	acgtagtcgc	ggtaattcaa	gaaattcaac	tcctggcagc	agtaggggaa	atttctctgc
1381	tcgaatggct	agcggagggtg	gtgaaactgc	cctcgcgcta	ttgctgctag	acagattgaa
1441	ccagcttgag	agcaaaagttt	ctggtaaaag	ccaacaacaa	caaggccaaa	ctgtcactaa
1501	gaaatctgct	gctgaggcat	ctaaaaagcc	tcgcaaaaaa	cgtacagcca	caaaacagta
1561	caacgtcact	caagcatttg	ggagacgtgg	tccagaacaa	acccaaggaa	atttcgggga
1621	ccaagaccta	atcagacaag	gaactgatta	caaacattgg	ccgcaaattg	cacaatttgc
1681	tccaagtgcc	tctgcattct	ttggaatgtc	acgcattggc	atggaagccg	caccttcggg
1741	aacatggctg	acttatcatg	gagccattaa	attggatgac	aaagatccac	aattcaaaga
1801	caacgtcata	ctgctgaaca	agcacattga	cgcatacaaa	acattcccac	caacagagcc
1861	taaaaaggac	aaaaagaaaa	agactgatga	agctcagcct	ttgccgcaga	gacaaaagaa
1921	gcagcccact	gtgactcttc	ttcctgcggc	tgacatggat	gattttctca	gacaacttca
1981	aaattccatg	agtggagctt	ctgctgattc	aaactcaggca	taaacactca	tgatgaccac
2041	acaaggcaga	tgggctatgt	aaacgttttc	gcaattccgt	ttacgataca	tagtctactc
2101	ttgtgcagaa	tgaattctcg	taactaaaca	gcacaagtag	gtttagttaa	ctttaatctc
2161	acatagcaat	ctttaatcaa	tgtgtaacat	tagggaggag	ttgaaagagc	caccacattt
2221	tcatcgaggc	cacgcggagt	acgatcgagg	gtacagtga	taatgctagg	gagagctgcc
2281	tatatggaag	agccctaata	tgta			

Figure 14A

1 caagtcttcc aaaaccattg ttgagtcctg cggtaactat aaagttacca agggaaagcc
61 cgtaaaagggt gcttggaca ttggacaaca gagatcagtt ttaacaccac tgtgtggtt
121 tccctcacag gctgctgggt ttatcagatc aatttttgcg cgcacacttg atgcagcaaa
181 ccactcaatt cctgatttgc aaagagcagc tgtcaccata ctgatggta ttctgaaca
241 gtcattacgt ctgtcgcagc ccatggttta tacttcagac ctgctacca acagtgtcat
301 tattatggca tatgtaactg gtggtcttgt acaacagact tctcagtgtt tgtctaact
361 ttggggcact actgttga aaactcaggcc tatctttgaa tggattgagg cgaaacttag
421 tgcaggaggt gaatttctca aggatgcttg ggagattctc aaatttctca ttacaggtgt
481 ttttgacatc gtcaagggtc aaatacaggt tgcctcagat aacatcaagg attgtgtaa
541 atgcttcatt gatgttgta acaaggcact cgaaatgtgc attgatcaag tcaatcgc
601 tggcgcaaag ttgcgatcac tcaacttagg tgaagtctc atcgctcaa gcaagggact
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721 aaaagaagta accttcttg aagggtatc acatgacaca gtacttacct ctgaggaggt
781 tgttctcaag aacgttgaac tcgaagcact cgagacgccc gttgatagct tcacaaatgg
841 agctatcgtt ggacaccag tctgtgtaa tggcctcatg ctcttagaga ttaaggacaa
901 agaacaatac tgcgcattgt ctctggtt actggctaca aacaatgtct ttcgcttaa
961 agggggtgca ccaattaaag gtgtaacctt tggagaagat actgtttggg aagtcaagg
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1081 aaagtctctt gtctacactg ttgaatccgg taccgaagtt actgagtttg catgtgtgt
1141 agcagaggct gttgtgaaga cttacaacc agtttctgat ctcttaccac acatgggtat
1201 tgaatctgat gagggtgag tagctacatt ctacttatt gatgatgctg gtgaagaaa
1261 cttttcatca cgtatgtatt gttcctttta cctccagat gaggaagaag aggacgatc
1321 agagtgtgag gaagaagaaa ttgatgaac ctgtgaacat gaggtaggta cagaggatga
1381 ttatcaaggt ctccctctgg aatttgggtc ctacgtgaa acagttcag ttgaggaaga
1441 agaagaggaa gactggcttg atgatactac tgagcaatca gagattgagc cagaaccaga
1501 acctacacct gaagaaccag ttaacagtt tactggttat ttaaaactta ctgacaatgt
1561 tgccattaaa tgtgtgaca ccgttaagga ggcacaaagt gctaactta tggtaggtt
1621 aaatgctgtt aacatacacc tgaacatgg tgggtgtgta gcagggtcac tcaacaaggc
1681 aaccaatggt gccatgcaa aggagagtga tgattacatt aagctaatg gccctttac
1741 agtaggaggg tcttgttgc ttctggaca taatcttct aagaagtgtc tgcattgtt
1801 tggacctaac ctaaatgcag gtgaggacat ccagcttctt aaggcagcat atgaaaatt
1861 caattcacag gacatcttac ttgcaccatt gttgtcagca ggcattttg gtgctaaacc
1921 acttcagctt ttacaagtgt gcgtgcagac gggtctgaca caggtttata ttgcagtcaa
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2101 tgtctacag aagcctgtcg atgtgaagcc aaaaattaag gccctgattg atagggtac
2161 cacaacactg gaagaaacta agtttcttac caataagtt ctctgtttg ctgatatcaa
2221 tggtaagctt taccatgatt ctcaaacat gcttagaggt gaagatatgt ctttcttga
2281 ggaggatgca cttacatgg taggtgatgt taccatagt ggtgatatca cttgtgtgt
2341 aataccctcc aaaaaggctg gtggcactac tgagatgctc tcaagagctt tgaagaaagt
2401 gccagttgat gattatataa ccacgtaccc tggacaagga tgtgtgtgtt atacattga
2461 ggaagctaag actgctctta agaatgcaa atctgcattt tatgtactac cticagaagc
2521 acctaatgct aaggaagaga ttctaggaac tgtatcttgg aatttgagag aaatgcttgc
2581 tcatgctgaa gaggcaagaa aattaatgcc tatatgcatg gatgttagag ccataatggc
2641 aaccatccaa cgtaatgata aaggagttaa aattcaagag ggcacgttg actatggtgt
2701 ccgattcttc ttittacta gtaaagagcc ttagcttctt attattacga agctgaactc
2761 tctaaatgag ccgcttgtca caatgccaat tggttatgtg acataggtt ttaatttga
2821 agaggctgag cgctgtatgc gttctttaa agctcctgcc gtagtgcag tatcaccac
2881 agatgctgtt actacatata atggatact cacttcgtca tcaagacat ctgaggagca
2941 cttttagtaa acagtttctt tggctgctc ttacagagat tggctctatt caggacagcg
3001 tacagagttt ggtgttgaat ttcttaagcg tggtgacaaa attgtgtacc acaccctgga

Figure 14B

3061 gagccccgtc gagtttcac ttgacgggtga ggttctttca cttgacaaac taaagagtct
3121 cttatccctg cgggagggtta agactataaa agtggtcaca actgtggaca acactaatct
3181 ccacacacag cttgtggata tgtctatgac atatggacag cagtttggtc caacatactt
3241 ggatgggtgt gatgttaca aaattaaacc tcatgtaaat catgagggtg agactttctt
3301 tgtactacct agtgatgaca cactacgtag tgaagctttc gagtactacc atactcttga
3361 tgagagtgtt cttggtaggt acatgtctgc tttaaaccac acaaagaaat ggaaatttcc
3421 tcaagtgggt gggttaactt caattaaatg ggctgataac aattgttatt tgtctagtgt
3481 tttattagca cttcaacagc ttgaagtcaa attcaatgca ccagcacttc aagagg

FIGURE 15A

1 caaaataatg tgttcattg tggagcaaaa tgttggactg agactgacct tactaaagga
61 cctcacgaat ttgctcaca gcatacaatg ctagttaaac aaggagatga ttactgttac
121 ctgccttacc cagatccatc aagaatatta ggcgcaggct gttttgtcga tgatattgtc
181 aaaacagatg gtacacttat gattgaaagg ttcgtgtcac tggctattga tgcttacc
241 ctacaaaac atcctaatac ggagtatgct gatgtcttc acttgattt acaatacatt
301 agaaagtac atgatgagct tactggccac atgttgga tgtattccgt aatgctaact
361 aatgataaca cctcacgga ctgggaacct gagttttatg aggctatga cacaccacat
421 acagtctgc aggtgttagg tgcctgtga ttgtgcaatt cacagacttc acttcgtgc
481 ggtgcctgta ttaggagacc actcctatgt tgcaagtgt gctatgacca tgcatttca
541 acatcacaca aattagtgtt gtcgttaac ccctatgtt gcaatgccc aggtgtgat
601 gtcactgatg tgacacaact gtatctagga ggtatgagct attattgcaa gtcacataag
661 cctccatta gtttccatt atgtgcta ggtcagggtt ttggttata caaaaacaca
721 tgtgtagga gtcacaatg cactgacttc aatgcgatg caacatgta ttggactaat
781 gctggcgatt acatactgc caacactgt actgagagac tcaagcttt cgcagcagaa
841 acgtcaaaag ccactgagga aacatttaag ctgtcatatg gtattgccac tgcgcgaa
901 gtactctgc acagagaatt gcatcttca tgggaggtg gaaaacctag accaccattg
961 aacagaaact atgtcttac tggttaccgt gtaactaaa atagtaaagt acagattgga
1021 gactacacct ttgaaaaagg tgactatgt gatgtgtg tgcacagagg tactacgaca
1081 tacaagtga atgttggtga ttactttg ttgacatc acactgta gccactagt
1141 gcactactc tagtgccaca agagcactat gtgagaatta ctggcttgta cccaacactc
1201 aacatctcag atgagtttc tagcaatgt gcaattatc aaaaggctcg catgcaaaag
1261 tactctacac tccaaggacc acctggtact ggtaagagtc atttgccat cggacttgc
1321 ctctattacc catctgctc catagtgtat acggcatgct ctcatgcagc tgttgatgcc
1381 ctatgtgaaa aggcattaaa atattgccc atagataaa gtagtagaat catacctgcg
1441 cgtgcgcgcg tagagtgtt tgataaattc aaagtgaatt caacactaga acagtatgt
1501 ttctgactg taaatgcatt gccagaaaca actgctgaca ttgtagtct tgcataaat
1561 tctatggcta ctaattatga ctgagtgt gtcaatgcta gacttcgtc aaaacactac
1621 gtctatattg gcgatctgc tcaattacca gcccccgca cattgctgac taaaggcaca
1681 ctagaaccag aatattttaa ttacgtgtc agacttatga aaacaatagg tccagacatg
1741 ttcttgga ctgtgcgcg ttgtctgct gaaattgtg acactgtgag tctttagt
1801 tatgacaata agctaaaagc acacaaggag aagtcagtc aatgcttcaa aatgtctac
1861 aaagggtgta ttacacatga tgttcatct gcaatcaaca gacctcaat aggcgtgta
1921 agagaattc ttacacgcaa tctgcttg agaaaagctg ttttatctc acctataat
1981 tcacagaacg ctgtagctc aaaaatcta ggattgccta cgcagactgt tgattcatc
2041 cagggtctg aatagacta tgcataatc acacaaacta ctgaaacagc acactctgt
2101 aatgtcaacc gcttcaatgt ggctatcaca agggcaaaa ttggcattt gtgcataatg
2161 tctgataggg atctttatga caaactgcaa ttacaagtc tagaaatacc acgtcgcaat
2221 gtggctacat tacaagcaga aaatgtaact ggactttta aggactgtg taagatcatt
2281 actggtctc atctacaca ggcacctaca cacctcagc ttgatataa gttcaagact
2341 gaaggattat gtgttgacat accaggcata ccaaaggaca tgacctaccg tagactcatc
2401 tctatgatg gttcaaaaat gaattacca gtcaatggtt accctaata gttatcacc
2461 cgcgaagaag ctattcgtc cgttcgtgc tggattggct ttgatgtaga gggctgtcat
2521 gcaactagag atgtgtggg tactaaccta cctctccagc taggattttc tacagggtt
2581 aacttagtag ctgtaccgac tggttatgt gacactgaaa ataacacaga attcaccaga
2641 gttaatgcaa aacctccacc aggtgaccag tttaaacatc ttataccact catgtataa
2701 ggcttgcctt ggaatgtagt gcgtattaag atagtacaaa tgcctagtga tactgaaa
2761 ggattgtcag acagagtcgt gttcgtctt tgggcgcag gctttgagct tacatcaatg
2821 aagtacttg tcaagattg acctgaaaga acgtgtgtc tgtgtgaca acgtgcaact
2881 tgccttcta ctcatcaga tacttatgcc tgcgtgaatc attctgtgg ttttgactat
2941 gtctataacc catttatgat tgatgtcag cagtggggct ttacgggtaa ccttcagagt
3001 aacctgacc aacattgcca ggtacatgga aatgcacatg tggctagtgt tgatgctatc

FIGURE 15B

3061 atgactagat gtttagcagt ccatgagtgc ttgttaagc gcgttgattg gtctgttgaa
3121 taccctatta taggagatga actgaggggt aattctgctt gcagaaaagt acaacacatg
3181 gttgtgaagt ctgcatgtct tgctgataag ttccagttc ttcatgacat tggaatcca
3241 aaggctatca agtgtgtgcc tcaggctgaa gtagaatgga agttctacga tgctcagcca
3301 ttagtgaca aagcttaca aatagaggaa ctctctatt ctatgctac acatcacgat
3361 aaattcactg atgggtttg ttgttttg aattgtaacg ttgatcgta cccagccaat
3421 gcaattgtgt gtaggttga cacaagagtc ttgtcaact tgaacttacc aggctgtgac
3481 ggtggtagtt tgtatgtgaa taagcatgca ttccacactc cagcttcga taaaagtga
3541 ttactaatt taaagcaatt gcccttctt tactattctg atagtccttg tgagtctcat
3601 ggcaaacaa tagtgtcgga tattgattat gtccactca aatctgtac gtgtattaca
3661 ctagtcaatt taggtgtgc tgttgacaga cccatgcaa atgagtaccg acagtacttg
3721 gatgcataa atatgatgat ttctgtgga tttagcctat ggatttaca acaattgat
3781 acttataacc tgtggaatac attaccagg ttacagagtt tagaaaatgt ggctataat
3841 gttgttaata aaggacactt tgatggacac gccggcgaag cactgttcc catcataat
3901 aatgctgttt acacaagggt agatgggtatt gatgtggaga tcttgaaag taagacaaca
3961 ctctctgta atgttgcat tgagctttg gctaagcgt acattaacc agtgccagag
4021 attagatac tcaataattt gggtgtgat atcgtgcta atactgta ctgggactac
4081 aaaagagaag cccagcaca tgtgttaca ataggtgtct gcacaatgac tgacattgcc
4141 aagaaaccta ctgagagtgc ttgttctca ctactgtct tgttgatgg tagagtggaa
4201 ggacaggtag accttttag aaacgccgt aatggtgtt taataacaga aggttcagtc
4261 aaagtctaa cacttcaaa gggaccagca caagctagcg tcaatggagt cacattaatt
4321 ggagaatcag taaaaacaca gttaactac tttaagaaag tagacggcat tattcaacag
4381 ttgctgaaa cctactttac tcagagcaga gacttagagg atttaagcc cagatcaca
4441 atggaaactg actttctga gctcgctatg gatgaattca tacagcgata taagctcgag
4501 ggctatgcct tcgaacacat cgtttatgga gatttcagtc atggacaact tggcggctt
4561 catttaatga taggcttagc caagcgtca caagattcac cacttaatt agaggattt
4621 atccctatgg acagcacagt gaaaaattac ttcataacag atgcgcaaac aggttcatca
4681 aaatgtgtgc gttctgtgat tgatcttta cttagtgact ttgtcgagat aataaagtca
4741 caagatttgt cagtgttcc aaaagtggc aaggttaca ttgactatgc tgaatttca
4801 ttcatgctt gggtgaagga tggacatgtt gaaacctct acccaaaact acaagcaagt
4861 caagcgtggc aaccaggtgt tgcgatgcct aactgtaca agatgcaaag aatgcttct
4921 gaaaagtgtg accticagaa ttatggtgaa aatgctgta taccaaaagg aataatgatg
4981 aatgtcgaa agtatactca actgtgtcaa tacttaata cacttactt agctgtacc
5041 tacaacatga gagttattca ctttggtgct ggctctgata aaggagtgc accaggtaca
5101 gctgtgtcga gacaatggt gccactggc acactactg tcgattcaga tcttaatgac
5161 ttgctctcg acgcagattc tactttaatt ggagactgt caacagtaca tacggcta
5221 aatgggacc ttattattag cgatatgat gaccctagga cc

FIGURE 16

1 cactacttta tgatgccaac tactttgttt gctggcacac acataactat gactactgta
61 taccatataa cagtgtcaca gatacaattg tcgttactga aggtgacggc atttcaacac
121 caaaactcaa agaagactac caaattgggtg gttattctga ggataggcac tcaggtgtta
181 aagactatgt cgttgtacat ggctatttca ccgaagtta ctaccagctt gagtctacac
241 aaattactac aaacactggt attgaaaatg ctacattctt catctttaac aagcttgta
301 aagaccacc gaatgtgcaa atacacacaa tcgacggctc ttcaggagtt gctaaccag
361 caatggatcc aatttatgat gagccgacga cgactactag cgtgccttg taagcacaag
421 aaagttagta cgaacttatg tactcattcg ttccggaaga aacaggtagc ttaatagta
481 atagcgact tcttttctt gccttcgtgg tattcttgc agtcacacta gccatccta
541 ctgcgcttcg attgtgtcgc tactgtcga atattgttaa cgtgagtta gtaaaacaa
601 cggttacgt ctactcgcgt gtaaaaaac tgaactctcc tgaaggagtt cctgatctc
661 tggctaaac gaactaacta ttattattat tctgtttgga actttaacat tgcttatcat
721 ggcagacaac ggtactatta ccgttgagga gcttaacaa ctctggaac aatggaacct
781 agtaataggt ttctattcc tagcctggat taigtacta caatttgcct attctaactg
841 gaacagggtt ttgtacataa taaagcttg ttctcttgg ctcttggtgc cagtaacact
901 tgctgtttt gtgcttctg ctgtctacag aattaattgg gtgactggcg ggattgcgat
961 tgcaatggct tgtattgtag gcttgatgtg gcttagctac ttcgttctt ccttcaggct
1021 gtttgcctg acccgctcaa tgtggtcatt caaccggaa acaaacattc ttccaatgt
1081 gcctctccgg gggacaattg tgaccagacc gctcatggaa agtgaacttg tcattggtgc
1141 tgtgatcatt cgtggctact tgcgaatggc cggacactcc ctaggggcgt gtgacattaa
1201 ggacctgcca aaagagatca ctgtggctac atcacgaacg ctctctatt acaaattagg
1261 agcgtcgcag cgtgtaggca ctgattcagg ttgtctgca tacaaccgct accgtattgg
1321 aaactataaa ttaaatacag accacgccgg tagcaacgac aatattgctt tgctagtaca
1381 gtaagtgaac acagatgtt catctgttg acttcagggt tacaatagca gagatattga
1441 ttatcattat gaggacttc aggattgcta ttggaatct tgacgttata ataagtcaa
1501 tagtgagaca attatttaag ccctaaacta agaagaatta ttcggagtt gatgatgaag
1561 aacctatgga gtagattat ccataaaacg aacatgaaaa ttattctct cctgacattg
1621 attgtattta catcttgcga gctatacac tatcaggagt gtgtagagg tacgactgta
1681 ctactaaaag aacctgccc atcagcaaca tacgagggca attaccatt tcacctctt
1741 gctgacaata aatttgact aactgcact agcacacact ttgctttgc ttgtgctgac
1801 g

FIGURE 17

1 aaagaacctt gcccatcagc aacatacgag ggcaattcac catttcaccc tcttgctgac
61 aataaatttg cactaacttg cactagcaca cactttgctt ttgcttgctg tgacggctact
121 cgacatacct atcagctgcg tgcaagatca gtttcaccaa aacttttcat cagacaagag
181 gaggttcaac aagagctcta ctgccactt ttctcattg ttgctgctct agtattttta
241 atactttgct tcaccattaa gaaaaagaca gaatgaatga gtcacttta attgacttct
301 atttgcttct ttagcccttt ctgctattcc ttgttttaaat aatgcttatt atattttggt
361 ttctactcga aatccaggat ctagaagaac ctgtaccaa agtctaaacg aacatgaaac
421 ttctcattgt ttgacttgt atttctctat gcagttgcat atgcactgta gtacagcgct
481 gtgcatctaa taaacctcat gtgcttgaag atccttgtaa ggtacaacac taggggtaat
541 acttatagca ctgcttggtt ttgtgctcta ggaagggtt taccttttca tagatggcac
601 actatggttc aaacatgcac acctaagtgt actatcaact gtcaagatcc agctggtggt
661 gcgcttatag ctagggtgtg gtaccttcat gaaggtcacc aaactgtgc atttagagac
721 gtactgttg tttaataaa acgaacaaat taaaatgtct gataatggac cccaatcaaa
781 ccaacgtagt gccccccgca ttacatttgg tggaccacaca gattcaactg acaataacca
841 gaatggagga cgcaatgggg caaggccaaa acagcgccga cccaagggt tacccaataa
901 tactgctgt ttggtcacag ctctactca gcatggcaag gaggaactta gattccctcg
961 aggccagggc gtccaatca acaccaatag tggccagat gaccaaattg gctactaccg
1021 aagagctacc cgacgaggtc gtggttggtga cggcaaatg aaagagctca gcccagatg
1081 gtacttctat tacctaggaa ctggcccaga agcttcactt ccctacggcg ctaacaaaga
1141 aggcacgta tgggttgcaa ctgagggagc ctgaataca ccaaagacc acattggcac
1201 ccgcaatcct aataacaatg ctgccaccgt gctacaactt cctcaaggaa caacattgcc
1261 aaaaggcttc tacgcagagg gaagcagagg cggcagtcac gcctcttctc gctctctac
1321 acgtatgctc ggtaatcaaa gaaattcaac tcctggcagc agtaggggaa atttctctgc
1381 tcgaatggct agcggaggtg gtgaaactgc cctcgcgcta ttgctgctag acagattgaa
1441 ccagcttgag agcaaaattt ctggtaaagg ccaacaacaa caaggccaaa ctgtactaa
1501 gaaatctgct gctgaggcat ctaaaaagcc tcgcaaaaaa cgtacagcca caaaacagta
1561 caacgtcact caagcatttg ggagacgttg tccagaacaa acccaaggaa atttcgggga
1621 ccaagaccta atcagacaag gaactgatta caaacatttg ccgcaaattg cacaatttgc
1681 tccaagtgcc tctgattctt ttggaatgc acgcattggc atggaagccg caccttcggg
1741 aacatggctg acttatcatg gagccattaa attggatgac aaagatccac aattcaaaga
1801 caacgtcata ctgctgaaca agcacattga cgcatacaaa acattccac caacagagcc
1861 taaaaaggac aaaaagaaaa agactgatga agctcagcct ttgccgcaga gacaaaagaa
1921 gcagcccact gtgactcttc ttctgcggc tgacatggat gatttctca gacaacttca
1981 aaattccatg agtggagctt ctgctgattc aactcaggca taaacttca tgaatgacc
2041 acaaggcaga tgggctatgt aaacgtttc gcaattccgt ttacgataca tagtctactc
2101 ttgtgcagaa tgaattctcg taactaaaca gcacaagtag gtttagttaa ctttaattc
2161 acatagcaat ctttaataca tgtgtaacat tagggaggac ttgaaagagc caccacatt
2221 tcatcgaggc cagcgggagt acgatcgagg gtacagttaa taatgctagg gagagctgcc
2281 tatatggaag agccctaag tgta

FIGURE 18A

1 caagtctttc aaaaccattg ttgagtcctg cggtaactat aaagttacca agggaaagcc
61 cgtaaaaggt gcttggaaca ttggacaaca gagatcagtt ttaacaccac tgtgtggttt
121 tccttcacag gctgctggtg ttatcagatc aatttttgcg cgcacacttg atgcagcaaa
181 ccactcaatt cctgatttgc aaagagcagc tgtcaccata ctgtatggta tttctgaaca
241 gtcattacgt cttgtcgacg ccatggttta tacttcagac ctgctcacca acagtgtcat
301 tattatggca tatgtaactg gtggtcttgt acaacagact tctcagtggg tgtctaact
361 ttggggcact actgttga aaactcaggcc tatctttgaa tggattgagg cgaaacttag
421 tgcaggagtt gaatttctca aggatgcttg ggagattctc aaatttctca ttacagggtg
481 ttttgacatc gtcaaggggc aaatacaggt tgcttcagat aacatcaagg attgtgtaaa
541 atgcttcatt gatgttgta acaaggcact cgaaatgtgc attgatcaag tcaactatgc
601 tggcgcaaag ttgcgatcac tcaacttagg tgaagtctc atcgctcaaa gcaagggact
661 ttaccgtcag tgtatactg gcaaggagca gctgcaacta ctcattgctc ttaaggcacc
721 aaaagaagta accttcttg aagggtgatt acatgacaca gtacttacct ctgaggaggt
781 tgttctcaag aacgggtgaac tcgaagcact cgagacgccc gttgatagct tcacaaatgg
841 agctatcgtt ggcacaccag tctgtgtaaa tggcctcatg ctcttagaga ttaaggacaa
901 agaacaatac tgcgcattgt ctctgggtt actggctaca aacaatgtct ttgccttaaa
961 aggggggtgca ccaattaaag gtgtaacctt tggagaagat actgtttggg aagttcaagg
1021 ttacaagaat gtgagaatca catttgagct tgatgaacgt gttgacaaag tgcttaatga
1081 aaagtgtctt gctacactg ttgaatccgg taccgaagtt actgagttt catgtgtgt
1141 agcagaggct gttgtgaaga ctttacaacc agtttctgat ctcttacca acatgggtat
1201 tgatcttgat gaggaggagt tagctacatt ctactattt gatgatgctg gtgaagaaaa
1261 cttttcatca cgtatgtatt gttcctttta cctccagat gaggaagaag aggacgatgc
1321 agagtgtgag gaagaagaaa ttgatgaaac ctgtgaacat gactacggtg cagaggatga
1381 ttatcaaggt ctccctctgg aatttggtgc ctacgtgaa acagttcgag ttgaggaaga
1441 agaagaggaa gactggctgg atgatactac tgagcaatca gagattgagc cagaaccaga
1501 acctacacct gaagaaccag ttaatcagtt tactgggtat taaaactta ctgacaatgt
1561 tgccattaaa tgtgttgaca ccgtaagga ggcacaaagt gctaactcta tgggtgattg
1621 aaatgtgctt aacatacacc tgaacatgg tgggtggtga gcagggtcac tcaacaaggc
1681 aaccaatggt gccatgcaaa aggagagtga tgattacatt aagctaaatg gccctcttac
1741 agtaggaggg tcttgtttgc tttctggaca taatcttgct aagaagtgc tgcattgtt
1801 tggacctaac ctaaatgcag gtgaggacat ccagcttctt aaggcagcat atgaaaatt
1861 caattcacag gacatcttac ttgcaccatt gttgtcagca ggcatattg gtgctaaacc
1921 acttcagtct ttacaagtgt gcgtgcagac gggtctgaca caggtttata ttgcagtcaa
1981 tgacaaagct ctttatgagc aggttgatcat ggattatctt gataacctga agcctagagt
2041 ggaagcacct aaacaagagg agccacaaaa cacagaagat tccaaaactg aggagaaatc
2101 tgtcgtacag aagcctgtcg atgtgaagcc aaaaattaag gcctgcattg atgaggttac
2161 cacaacactg gaagaaacta agtttcttac caataagta ctctgtttg ctgatatcaa
2221 tggtaagctt taccatgatt ctcaaacat gcttagaggt gaagatatgt ctttcttga
2281 ggaggatgca ctttacatgg taggtgatgt tatcactagt ggtgatatca cttgtgtgt
2341 aataccctcc aaaaaggctg gtggcactac tgagatgctc tcaagagctt tgaagaaagt
2401 gccagtgtat gattatataa ccacgtaccc tggacaagga tgtgtgtgtt atacacttga
2461 ggaagctaag actgctctta agaaatgcaa atctgcattt tatgtactac cttcagaagc
2521 acctaatgct aaggaagaga ttctaggaac tttatcctgg aatttgagag aaatgcttgc
2581 tcatgtgaa gaggcaagaa aattaatgcc tatatgcatg gatgttagag ccataatggc

FIGURE 18B

2641 aaccatccaa cgtaagtata aaggagttaa aattcaagag ggcacgttg actatggtgt
2701 ccgattcttc ttttatacta gtaaagagcc thtagcttct attattacga agctgaactc
2761 tctaaatgag ccgcttgatca caatgccaat tggttatgtg acacatggtt ttaatcttga
2821 agaggctgcg cgctgtatgc gttctcttaa agtcctgcc gtagtgcag tatcatcacc
2881 agatgctgtt actacatata atggatacct cacttcgtca tcaaagacat ctgaggagca
2941 cttttagtaa acagtttctt tggctggctc ttacagagat tggctctatt caggacagcg
3001 tacagagtta ggtgttgaat ttcttaagcg tggtgacaaa attgtgtacc acaccctgga
3061 gagccccgtc gagtttcac ttgacgggtga ggttcttca cttgacaaac taaagagtct
3121 cttatccctg cgggagggtta agactataaa agtggtcaca actgtggaca aactaatct
3181 ccacacacag cttgtggata tgtctatgac atatggacag cagtttggc caacatactt
3241 ggatggtgct gatgttaca aaattaaacc tcatgtaa catgagggtta agactttctt
3301 tgtactacct agtcatgaca cactacgtag tgaagcttc gactactacc atactcttga
3361 tgagagtttt cttggtagg acatgtctgc tttaaaccac acaaagaaat ggaaatttcc
3421 tcaagtgggt ggtttaactt caattaaatg ggctgataac aattgttatt tgtctagtgt
3481 ttattagca cttcaacagc ttgaagtcaa attcaatgca ccagcacttc aagagg

FIGURE 19

1 cattacttta tgatgccaac tactttgttt gctggcacac acataactat gactactgta
61 taccatataa cagtgtcaca gatacaattg tcgttactga aggtgacggc atttcaacac
121 caaaactcaa agaagactac caaattggig gttattctga ggataggcac tcaggtgtta
181 aagactatgt cgttgtacat ggctatttca ccgaagtta ctaccagctt gagtctacac
241 aaattactac aaacactggt attgaaaatg ctacattctt catctttaac aagcttgta
301 aagaccacc gaatgtgcaa atacacacaa tcgacggctc ttcaggagtt gctaaccag
361 caatggatcc aatttatgat gagccgacga cgactactag cgtgcctttg taagcacaag
421 aaagttagta cgaacttatg tactcattcg tticggaaga aacaggtagc ttaatagta
481 atagcgtagt tcttttctt gccttcgtgg tattcttgct agtcacacta gccatccta
541 ctgcgcttcg attgtgtcgc tactgctgca atattgtaa cgtgagtta gtaaaccaa
601 cggtttactg ctactcgcgt gttaaaaatc tgaactctcc tgaaggagtt cctgatcttc
661 tggctctaac gaactaacta ttattattat tctgtttgga actttaacat tgcttatcat
721 ggcagacaac ggtactatta ccgttgagga gcttaacaa ctctggaac aatggaacct
781 agtaaatagg ttctattcc tagcctggat tatgttacta caattgcct attctaactg
841 gaacagggtt tigtacataa taaagcttg ttctctcgg ctcttggtgc cagtaacact
901 tgctgtttt gtgcttgctg ctgtctacag aattaattgg gtgactggcg ggattgcgat
961 tgcaatggct tgtattgtag gcttgatgtg gcttagctac ttcgttgctt ccttcaggct
1021 gtttgctcgt acccgctcaa tgtggtcatt caaccggaa acaaacatc ttcccaatgt
1081 gccctccgg gggacaattg tgaccagacc gctcatggaa agtgaactig tcattggtgc
1141 tgtgatcatt cgtggcact tgcgaatggc cggacactcc ctagggcgct gtgacattaa
1201 ggacctgcca aaagagatca ctgtggctac atcacgaacg ctttctatt acaaattagg
1261 agcgtcgcag cgtgtaggca ctgattcagg ttttgctgca tacaaccgct accgtattgg
1321 aaactataaa ttaataacag accacgccgg tagcaacgac aatattgctt tgctagtaca
1381 gtaagtgaca acagatgttt catctgttg acttccagg tacaatagca gagatattga
1441 ttatcattat gaggacttc aggattgcta ttggaatct tgacgttata ataagtcaa
1501 tagtgagaca attatttaag cctctaacta agaagaatta ttcggagta gatgatgaag
1561 aacctatgga gttagattat ccataaaacg aacatgaaa ttattcttt cctgacattg
1621 attgtattta catctgcca gctatatcac tatcaggagt gtgttagagg tacgactgta
1681 ctactaaaag aaccttgccc atcagcaaca tacgagggca attcaccatt tcacctctt
1741 gctgacaata aattgcact aactgcact agcacacact ttgctttgc ttgtgctgac
1801 g

FIGURE 20

1 tctgtgtacg tgcgctcgg ctgcatgcct agtgcaccta cgcagtataa acaataataa
61 attttactgt cgttgacaag aaacgagtaa ctgctccctc ttctgcagac tgcttacggt
121 ttcgtccgtg ttgcagtcga tcatcagcat acctagggtt cgtccgggtg tgaccgaaag
181 gtaagatgga gagccttggt cttgggtgca acgagaaaac acacgtccaa ctgagtttgc
241 ctgtccttca ggttagagac gtgctagtgc gtggcttcgg ggactctgtg gaagaggccc
301 tatcgagggc acgtgaacac ctcaaaaatg gcacttggg tctagtagag ctggaaaaag
361 gcgtactgcc ccagcttgaa cagccctatg tgttcattaa acgttctgat gccttaagca
421 ccaatcacgg ccacaaggtc gttgagctgg ttgcagaaat ggacggcatt cagtacggtc
481 gtacgggtat aacactggga gtactcgtgc cacatgtggg cgaaaccca attgcatacc
541 gcaatgttct tcttcgtaag aacggtata agggagccgg tggctatagc tatggcatcg
601 atctaaagtc ttatgactta ggtgacgagc ttggcactga tcccattgaa gattatgaac
661 aaaactggaa cactaagcat ggagtggtg cactccgtga actcactcgt gagtcaatg
721 gaggtgtagt cactcgtat gtcgacaaca atttctgtg cccagatggg taccctctg
781 attgcatcaa agattttcta gcacgcgagg gcaagtcaat gtgactctt tccgaacaac
841 ttgattacat cgagtcgaag agaggtgtct actgctgccg tgaccatgag catgaaattg
901 cctggttcac tgagcgctct gataagagct gcgagcacca gacaccctc gaaattaaga
961 gtgccaagaa atttgacact ttcaaagggg aatgccccaa gtttgtgtt cctcttaact
1021 caaaagtcaa agtcattcaa ccacgtgtg aaaagaaaa gactgagggt ttcatggggc
1081 gtatacgctc tgtgtaccct gttgcatc cagaggagt taacaatatg cactgtcta
1141 ccttgatgaa atgtaatcat tgcgatgaag ttcatggca gacgtgcgac ttctgaaag
1201 ccacttgtga acattgtggc actgaaaatt tagttattga aggacctact acatgtgggt
1261 acctacctac taatgctgta gtgaaaatgc catgtcctgc ctgtcaagac ccagagattg
1321 gacctgagca tagtgttgca gattatcaca accactcaaa cattgaaact cgactccgca
1381 agggaggtag gactagatgt ttggaggct gtgtgttgc ctatgttggc tgctataata
1441 agcgtgccta ctgggttct cgtgctagt ctgatattgg ctaggccat actggcatta
1501 ctggtgacaa tgtggagacc ttgaatgagg atctcctga gatactgagt cgtgaacgtg
1561 ttaacattaa cattgttggc gattttcatt tgaatgaaga ggttgccatc attttggcat
1621 ctctctgc ttctacaagt gcctttattg aactataaa gactcttgat tacaagtctt
1681 tcaaaacat tgttgagtc tgcggt

FIGURE 21 (A)

1 agtgttttat tagcacttca acagcttgaa gtcaaattca atgcaccagc acttcaagag
61 gcttattata gagcccgtagc tggtagtgct gctaactttt gtgcactcat actcgcttac
121 agtaataaaa ctgttggcga gcttggatgat gtcagagaaa ctatgaccca tcttctacag
181 catgctaatt tggaaatcgc aaagcgagtt cttaatgtgg tgtgtaaaca ttgtggtcag
241 aaaactacta ccttaacggg ttagaagct gtgatgtata tgggtactct atcttatgat
301 aatcitaaga cagggtgttc cattccatgt gtgtgtggc gtgatgtac acaatatcta
361 gtacaacaag agtcttcttt ttttatgatg tctgcaccac ctgctgagta taaattacag
421 caaggtacat tcttatgtgc gaatgagtag acttgtaact atcagtgtgg tcattacact
481 catataactg ctaaggagac cctctatcgt attgacggag ctcaccttac aaagatgtca
541 gagtacaaag gaccagtgac tgatgttttc tacaaggaaa catcttacac tacaaccatc
601 aagcctgtgt cgtataaact cgtaggagtt acttacacag agattgaacc aaaattggat
661 gggattataaaa aaaggataa tgcctactat acagagcagc ctatagacct tgtaccaact
721 caaccattac caaatgcgag ttttgataat ttcaaactca catgttctaa cacaaaattt
781 gctgatgatt taaatcaaat gacaggcttc acaaagccag cttcacgaga gctatctgtc
841 acattcttc cagacttgaa tggcgatgta gtggctattg actatagaca ctattcagcg
901 agtttcaaga aagggtgctaa attactgcat aagccaattg tttggcacat taaccaggct
961 acaaccaaga caacgttcaa accaaacact tgggttttac gttgtctttg gagtacaaag
1021 ccagtagata cttcaaattc atttgaagt ctggcagtag aagacacaca aggaatggac
1081 aatcttgctt gtgaaagta acaaccacc tctgaagaag tagtggaataa tcttaccata
1141 cagaaggaag tcatagagtg tgacgtgaaa actaccgaag tttaggcaa tgcatactt
1201 aaaccatcag atgaagggtgt taaagtaaca caagagttag gtcagagga tcttatggct
1261 gcttatgtgg aaaacacaag cattaccatt aagaaccta atgagcttc actagcctta
1321 ggtttaaaaa caattgccac tcatggtatt gctgcaatta atagtgttc ttggagtaaa
1381 attttggctt atgtcaaacc attcttaga caagcagcaa ttacaacatc aaattgcgct
1441 aagagattag cacaacgtgt gtttaacaat tatatgcctt atgtgtttac attattgttc
1501 caattgtgta cttttactaa aagtaccaat tctagaatta gagcttcact acctacaact
1561 attgctaaaa atagtgttaa gagtgtgct aaattatgtt tggatgccg cattaatat
1621 gtgaagtcac ccaaattttc taaattgttc acaatcgta tgtggctatt gttgttaagt
1681 atttgcttag gttcttaat ctgtgtaact gctgctttg gtgtactct atctaattt
1741 ggtgctcctt cttattgtaa tggcgtaga gaattgtatc ttaattcgtc taacgttact
1801 actatggatt tctgtgaagg ttcttttct tgcagcattt gtttaagtgg attagactcc
1861 ctgtattctt atccagctct tgaaccatt caggtagca ttcatcgta caagctagac
1921 ttgacaattt taggtctggc cgctgagtggt gttttggcat atatgttgt cacaaaattc
1981 ttttatttat taggtcttc agctataatg cagggtgtct ttggctattt tgtagtcat
2041 ttcatcagca attcttggt catgtggtt atcattagta ttgtacaaat ggcacccgtt
2101 tctgcaatgg ttaggatgta catctcttt gcttcttct actacatatg gaagagctat
2161 gttcatatca tggatgggtg cacctcttcg acttgcatga tgtgtataa gcgcaatcgt
2221 gccacacgag ttgagtgtac aactattgtt aatggcatga agagatcttt ctatgtctat
2281 gcaaatggag gccgtggctt ctgcaagact cacaattgga attgtctcaa ttgtgacaca
2341 ttttgactg gtagtacatt cattagtgt gaagtgtc gtgattgtc atccagttt
2401 aaaagaccaa tcaaccctac tgaccagta tegtatatg ttgatagtgt tctgtgaaa
2461 aatggcgcgc ttacactcta ctttgacaag gctgggtcaa agacctatga gagacatccg
2521 ctctccatt ttgtcaatt agacaattg agagctaaca aactaaagg ttactgcct
2581 attaatgta tagttttga tggcaagtc aaatgcgacg agtctgttc taagtctgt
2641 tctgttact acagtcagct gatgtgcaa cctattctgt tcttgacca agctcttgta
2701 tcagacgttg gagatagtag tgaagtctcc gttatagatg ttgatgctta tctgcacac
2761 ttttcagcaa ctttagtgt tctatggaa aaacttaagg cactgtgtc tacagctcac
2821 agcgagttag caaagggtgt agcttttagt ggtgtcctt ctacatcgt gtcagctgcc
2881 cgacaagggt ttgttgatac cgtgttgac acaaaggatg ttattgaatg tctcaactt
2941 tcacatcact ctgacttaga agtgacaggt gacagttgta acaattcat gctcacctat
3001 aataagggtg aaaacatgac gccagagat ctggcgcat gtattgactg taatgcaagg

FIGURE 21 (B)

3061 catatcaatg cccaagtagc aaaaagtcac aatgtttcac tcatctggaa tgtaaagac
3121 tacatgtctt tatctgaaca gctgcgtaaa caaatcgtg gtgctgcaa gaagaacaac
3181 atacctttta gactaacttg tgctacaact agacagggtg tcaatgtcat aactactaaa
3241 atctcactca aggggtggtaa gattgttagt acttgtttta aacttatgct taaggccaca
3301 ttattgtcgc ttctgtctgc attggtttgt tatatcgta tgccagtaca tacattgtca
3361 atccatgatg gttacacaaa tgaatcatt ggttacaag ccattcagga tgggtcact
3421 cgtgacatca ttctactga tgattgttt gcaataaac atgctggtt tgacgcatgg
3481 tttagccagc gtgtgtgttc atacaaaaat gacaaaagct gccctgtagt agctgctatc
3541 attacaagag agattggttt catagtgcct ggcttaccgg gtactgtgt gagagcaatc
3601 aatggtgact tcttgcatct tctaccctgt gtttttagtg ctgttggaac catttgctac
3661 acaccttcca aactcattga gtatagtgt ttgctacct ctgctgctg tcttgtgtgt
3721 gagtgtaaca ttttaagga tgctatgggc aaacctgtgc catattgtta tgactaat
3781 ttgctagagg gttctatttc ttatagttag ctctgtccag acactcgta tggcttatg
3841 gatggttcca tcatacagtt tctaactact tacctggagg gttctgttag agtagtaaca
3901 acttttgatg ctgagtactg tagacatggt acatgcgaaa ggtagaagt aggtatttgc
3961 ctatctacca gtggttagtg gtttctaat aatgagcatt acagagctct atcaggagtt
4021 ttctgtgtgt ttgatgcgat gaatctcata gtaacatct ttactctct tgtgcaacct
4081 gtgggtgctt tagatgtgtc tgcttcagta gtggctgggt gtattattgc catattggtg
4141 acttgctgct cctactactt tatgaaatc agacgtgttt ttggtgagta caaccatgtt
4201 gttgctgcta atgcacittt gttttgatg tcttctacta tactctgtct ggtaccagct
4261 tacagcttgc tgccgggagt ctactcagtc tttacttgt acttgacatt ctatttcacc
4321 aatgatgttt cattcttggc tcaccttcaa tggtttgcca tgtttctcc tatttgctct
4381 ttttgataa cagcaatcta tgtattctgt atttctctga agcactgcca ttggttctt
4441 aacaactatc ttaggaaaag agtcatgttt aatggagta catttagtac ctctgaggag
4501 gctgctttgt gtacctttt gctcaacaag gaaatgtacc taaaattgct tagcgagaca
4561 ctgttgccac ttacacagta taacaggat ctgtctctat ataacaagta caagtatttc
4621 agtggagcct tagatactac cagctatcgt gaagcagctt gctgccactt agcaaaggct
4681 cttaatgact tttagcaact aggtgctgat gttctctacc aaccaccaca gacatcaatc
4741 acttctgctg ttctgcagag tggttttagg aaaatggcat tcccgtagg caaagttaga
4801 ggggtcatgg tacaagtaac ctgtggaact acaactctta atggattgtg gttggatgac
4861 acagtatact gtccaagaca tgtcatttgc acagcagaag acatgcttaa tctaactat
4921 gaagatctgc tcatcgcaa atccaacat agctttcttg ttacggctgg caatgttcaa
4981 ctctgttga ttggccattc tatgcaaaa tgtctgctta ggcttaagt tgatactct
5041 aaccctaaga cacccaagta taaattgtc cgtatccaac ctggtcaaac attttcagtt
5101 ctagcatgct acaatggttc accatctggt gtttatcagt gtgccatgag acctaatac
5161 accattaaag gttcttctct taatggatca tgtggtagt ttggttttaa cattgattat
5221 gattgcgtgt tcttctgcta tatgcatcat atggagcttc caacaggagt acacgctggt
5281 accgacttag aaggtaaatt ctatggtcca ttgttgaca gacaaactgc acaggctgca
5341 ggtacagaca caaccataac attaaatgtt ttggcatggc tgtatgctgc tgttatcaat
5401 ggtgataggt ggtttcttaa tagattcacc actactttga atgactttaa ccttgtggca
5461 atgaagtaca actatgaacc ttgacacaa gatcatgttg acatatggg acctctttct
5521 gctcaaacag gaattgccgt cttagatag tgtgctgctt tgaagagct gctgcagaat
5581 ggtatgaatg gtcgtactat ccttggttagc actattttag aagatgagtt tacaccattt
5641 gatgttgta gacaatgctc tgggttacc ttccaaggta agttcaagaa aattgttaag
5701 ggcactcacc attggatgct ttttaacttc ttgacatcac tattgattct tgttcaaggt
5761 acacagtggg cactgttttt cttgtttac gagaatgctt tcttgccatt tactcttggg
5821 attatggcaa ttgctgatg tgctatgctg cttgttaagc ataagcacgc attcttgtgc
5881 ttgtttctgt tacttctct tgcaacagtt gcttacttta atatggtcta catgctgct
5941 agctgggtga tgcgtatcat gacatggctt gaattggctg acactagctt gtctggttat
6001 aggttaagg attgtttat gtatgcttca gctttagtt ttgcttattct catgacagct
6061 cgcactgttt atgatgatgc tgctagacgt gtttggacac tgatgaatgt cattacactt

FIGURE 21 (C)

6121 gtttacaaag tctactatgg taatgcttta gatcaagcta ttccatgtg ggccttagtt
6181 atttctgtaa cctctaacta ttctgggtgc gttacgacta tcatgttttt agctagagct
6241 atagtgtttg tgtgtgttga gtattatcca ttgtatttta ttactggcaa caccttacag
6301 tgtatcatgc ttgtttattg ttcttaggc tattgttgc gctgctactt tggccttttc
6361 tgtttactca accgttactt caggcttact ctgtgtgttt atgactactt ggtctctaca
6421 caagaattta ggtatatgaa ctcccagggg ctttgcctc ctaagagtag tattgatgct
6481 ttcaagctta acattaagtt gttgggtatt ggaggtaaac catgtatcaa ggttgctact
6541 gtacagtcta aaatgtctga cgtaaagtgc acatctgtgg tactgctctc ggttcttcaa
6601 caacttagag tagagtcac ttctaaattg tgggcacaat gtgtacaact ccacaatgat
6661 atttcttctg caaaagacac aactgaagct ttcgagaaga tggtttctct ttgtctgtt
6721 ttgctatcca tgcaggggtgc ttagacatt aatagggtgt gcgaggaaat gctcgataac
6781 cgtgctactc ttcaggctat tgcttcagaa tttagttctt taccatcata tgcgccttat
6841 gccactgccc aggaggccta tgagcaggct gtatgtaatg gtgattctga agtcgttctc
6901 aaaaagttaa agaaatcttt gaatgtggct aaatctgagt ttgacctga tgcgccatg
6961 caacgcaagt tggaaaagat ggcagatcag gctatgacct aaatgtacaa acaggcaaga
7021 tctgaggaca agagggccca agtcgttct gctatgcaaa caatgctctt cactatgcta
7081 aggaagcttg ataattatgc acttaacaac attatcaaca atgcgcgtga tggttgtgtt
7141 ccaactaaca tcataccatt gactacagca gccaaactca tggttgtgtt ccttgattat
7201 ggtacctaca agaactctg tgatggtaac acctttacat atgcactgc actctgggaa
7261 atccagcaag ttgttgatgc ggatagcaag attgttcaac ttagtgaat taacatggac
7321 aattcaccaa atttgcttg gcctcttatt gttacagctc taagagccaa ctacagctgtt
7381 aaactacaga ataataact gagtccagta gcactacgac agatgtcctg tgcggctggt
7441 accacacaaa cagcttgatc tgatgacaat gcactgcct actatacaa ttcgaaggga
7501 ggtagggttg tgctggcatt actatcagac caccaagatc tcaaatgggc tagattccct
7561 aagagtgatg gtacaggtac aatttacaca gaactggaac cacctgtag gttgttaca
7621 gacacaccaa aagggcctaa agtgaatac ttgtactca tcaaggctt aaacaaccta
7681 aatagaggta tgggtctggg cagttagct gctacagtac gtcttcaggc tggaaatgct
7741 acagaagtac ctgccaattc aactgtgctt tccttctgtg cttttgcagt agacctgct
7801 aaagcatata aggattacct agcaagtga ggacaacaa tccaactg tgtgaagatg
7861 ttgtgtacac aactgggtac aggacaggca attactgtaa caccagaagc taacatggac
7921 caagagctct ttgtgtgtgc ttcatgtgt ctgtattgta gatgccacat tgacctcca
7981 aatcctaaag gattctgtga ctgaaagggt aagtacgtcc aaatactac cacttgtgct
8041 aatgaccag tgggttttac acttagaacc acagtctgta ccgtctcgg aatgtggaaa
8101 ggttatggct gtagttgtga ccaactccgc gaaccttga tgcagtctgc ggatgcata
8161 acgtttttta acgggtttgc ggtgtaagtg cagccctgtc tacacctgc ggcacaggca
8221 ctagtactga tgcgtctac agggctttg atatttaca cgaaaaagt gctggtttg
8281 caaagtctc aaaaactaat tgcgtcgtc tccaggagaa ggatgaggaa ggcaatttat
8341 tagactctta cttgtagt aagaggcata ctatgctaa ctaccaacat gaagagacta
8401 ttataactt ggttaaagat tgtccagcgg ttgctgtcca tgacttttc aagtttagag
8461 tagatggtga catggtacca catatatcac gtcagcgtct aactaaatac acaatggctg
8521 atttagtcta tgcctacgt cattttgatg agggtaattg tgatacatta aaagaatac
8581 tcgtcacata caattgctgt gatgatgatt atttcaataa gaaggattgg tatgactcg
8641 tagagaatcc tgacatctta cgcgtatag ctaacttagg tgagcgtgta cgccaatcat
8701 tattaagac tgtacaattc tgcgatgcta tgcgtgatgc aggcattgta ggcgtactga
8761 cattagataa tcagatctt aatgggaact ggtacgattt cggtgatttc gtacaagtag
8821 caccaggctg cggagtctt attgtggatt catattactc attgctgatg cccatcctca
8881 cttgactag ggcattggct gctgagtcct atatggatgc tgatctgca aaaccactta
8941 ttaagtggga ttgctgaaa tatgatttta cggaagagag actttgtctc ttcgacctt
9001 attttaata ttgggaccag acataccatc ccaattgtat taactgttg gatgataggt
9061 gtatccttca ttgtgcaaac tttaattgtt tattttctac tgtgttcca cctacaagt
9121 ttggaccact agtaagaaaa atattttag atggtgttcc tttgtgtt tcaactggat
9181 accattttcg tgagttagga gtcgtacata atcaggatgt aaactacat agctcgcgtc

FIGURE 21 (D)

9241 tcagtttcaa ggaactttta gtgtatgctg ctgatccagc tatgcatgca gcttctggca
9301 atttattgct agataaacgc actacatgct tttcagtagc tgcactaaca aacaatgttg
9361 cttttcaaac tgtcaaaccg ggtaatttta ataaagactt ttatgacttt gctgtgtcta
9421 aaggtttctt taagggaagga agttctgttg aactaaaaca cttctctttt gctcaggatg
9481 gcaacgctgc tatcagtgat tatgactatt atcggtataa tctgccaaca atgtgtgata
9541 tcagacaact cctattcgta gttgaagttg ttgataaata ctttgattgt tacgatggtg
9601 gctgtattaa tgccaaccaa gtaatcgta acaatctgga taaatcagct gggttcccat
9661 ttaataaatg gggtaaggct agactttatt atgactcaat gagttatgag gatcaagatg
9721 cacttttcgc gtatactaag cgtaatgtca tccctactat aactcaaatg aatcctaagt
9781 atgccattag tgcaaagaat agagctcgca ccgtagctgg tgtctctatc tgtagtacta
9841 tgacaatatg acagtttcat cagaaattat tgaagtcaat agccgccact agaggagcta
9901 ctgtggtaat tggaacaagc aagttttacg gtggctggca taatatgta aaaactgttt
9961 acagtgatgt agaaactcca caccttatgg gttgggatta tccaaaatgt gacagagcca
10021 tgcctaacat gcttaggata atggcccttc ttgttcttgc tgcgcaacat aacacttgct
10081 gtaacttalc acaccgttgc tacagggttag ctaacgagtg tgcgcaagta ttaagtgaga
10141 tggctatgtg tggcgggtca ctatatgta aaccagggtg aacatcatcc ggtgatgcta
10201 caactgcita tgctaatagt gtctttaaca ttgtcaagc tgttacagcc aatgtaaatg
10261 cacttcttgc aactgatggt aataagatag ctgacaagta tgtccgcaat ctacaacaca
10321 ggctctatga gtgtctctat agaaataggg atgttgatca tgaattcgtg gatgagtttt
10381 acgcttacct gcgtaaacat ttctccatga tgattcttgc tgatgatgcc gttgtgtgct
10441 ataacagtaa ctatgcggct caagggttag tagctagcat taagaacttt aaggcagttc
10501 tttattatca aaataatgtg ttcattgtct aggcaaaatg ttggac

FIGURE 22

1 gtaccttcat gaaggtcacc aaactgctgc atttagagac gtacttggtg ttttaataa
61 acgaacaaat taaaatgtct gataatggac cccaatcaaa ccaacgtagt gcccccgca
121 ttacatttgg tggaccaca gattcaactg acaataacca gaatggagga cgcaatgggg
181 caaggccaaa acagcgccga cccaaggtt tacccaataa tactgcgtct tggttcacag
241 ctctcactca gcatggcaag gaggaactta gattccctcg aggccagggc gttccaatca
301 acaccaatag tggccagat gaccaaattg gctactaccg aagagctacc cgacgagttc
361 gtggtggtga cggcaaaatg aaagagctca gcccagatg gtacttctat tacctaggaa
421 ctggcccaga agcttcactt ccctacggcg ctaacaaaga aggcacgta tgggttgcaa
481 ctgaggggagc cttgaataca ccaaagacc acattggcac ccgcaatcct aataacaatg
541 ctgccaccgt gctacaactt cctcaaggaa caacattgcc aaaaggcttc tacgcagagg
601 gaagcagagg cggcagtcga gcctcttctc gctcctcacc acgtagtgcg ggtaattcaa
661 gaaattcaac tcctggcagc agtaggggaa attctcctgc tcgaatggct agcggagggtg
721 gtgaaactgc cctcgcgcta ttgctgctag acagattgaa ccagcttgag agcaaagttt
781 ctggtaaaagg ccaacaacaa caaggccaaa ctgtactaa gaaatctgct gctgaggcat
841 ctaaaaagcc tcgcaaaaaa cgtactgcca caaacagta caacgtcact caagcattt
901 ggagacgtgg tccagaacaa acccaaggaa atttcgggga ccaagaccta atcagacaag
961 gaactgatta caaacattgg ccgcaaattg cacaatttgc tccaagtgcc tctgcattct
1021 ttggaatgtc acgcattggc atggaagtca cacttcggg aacatggctg acttatcatg
1081 gagccattaa attgcatgac aaagatccac aattcaaaga caacgtcata ctgctgaaca
1141 agcacattga cgcatacaaa acattccac caacagagcc taaaaggac aaaaagaaaa
1201 agactgatga agctcagcct ttgccgcaga gacaaaagaa gcagcccact gtgactctc
1261 ttctgcggc tgacatggat gatttctcca gacaacttca aaattccatg agtggagctt
1321 ctgctgattc aactcaggca taaacactca tgatgaccac acaaggcaga tgggctatgt
1381 aaacgttttc gcaattccgt ttacgataca tagtctactc ttgtgcagaa tgaattctc
1441 taactaaaca gcacaagtag gtttagttaa cttaatctc acatagcaat cttaataca
1501 tgtgtaacat tagggaggac ttgaaagagc caccacattt tcatcgaggc cacgcggagt
1561 acgatcgagg gtacagtga taatgctagg gagagctgcc tatatggaag agccctaattg

FIGURE 23

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQGLPNNTASWFTALTQHGKEEL
RFPRGQGVPIINTNSGPDDQIGYYRRATRRVRGGDGKMKELSPRWYFYLLGTGPEASLPYGANKEG
IVWVATEGALNTPKDHIGTRNPNNNAATVLQLPQGTTLPKGFYAEGSRGGSQASSRSSSRSGNS
RNSTPGSSRGNSPARMASGGGETALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPR
QKRTATKQYNVTQAFGRRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEV
TPSGTWLTYHGAIKLDDKDPQFKDNVILLNKHIDAYKTFFPTEPKDKKKKTDEAQPLPQRQKKQ
PTVTLLPAADMDDFSRQLQNSMSGASADSTQA

Figure 24

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPGFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPTEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 25

(A)

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKGIFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEAAPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

(B)

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPKGIFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEAAPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 26

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPGFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 27

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFGNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPLAELKCSVKSFEIDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVPPSPDGKPCTPPALNCYWPLNDYGfYTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKQCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPSCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIA
GLIAIVMTILLCCMTSCCCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 28

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFGNPVIPPFDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGFLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPALAEKCSVKSFEDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNDLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVPPSPDGKPCPTPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKNCVNFNFNGLTGTGVLTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPCAFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVFVFNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIGA
GLIAIVMVTILLCCMTSCCCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 29

MFIFLLFLTTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFGNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIISNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGSLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDIWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPALAEKCSVKSFEDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPDDFMGCVLAWNTGNIDATSTGNYDYKYRYLRHGKLRP
FERDISNVFPSPDGKPCPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKNCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAEHVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLPFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAGIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAIHEGKAYFPREGVFVFNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIGA
GLIAIVMVTILLCCMTSCCSCCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT

FIGURE 30

(A)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILLNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHPLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(B)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILLNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(C)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILPNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

(D)

MADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYSNNRNF
LYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMACIVGLMWLSYFVASFRLF
ARTRSMWSFNPETNILPNVPLRGTIVTRPLMESELVIGAVIIRGHLMAGHSLGRCDI
KDLPEITVATSRTLSTYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIAL
LVQ

FIGURE 31

(A)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

(B)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

(C)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSPEGVPDLLV

(D)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSPEGVPDLLV

(E)

MYSFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCC
NIVNVSLVKPTVYVYSRVKNLNSSEGVPDLLV

FIGURE 32 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCGN
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSIFARTLDAANHSIPDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIMAYVTGGLVQQTTSQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLQPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEEIDETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVIVNAANIHLKHGGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVVGPNLNAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEEPPNTEDSKTEEKSVVQKPVDV
KPKIKACIDEVTTTLEETKFLTNNKLLLFADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSCKAGGTTEMLSRALKKVPVDEYITTPGQGCAGYTLLEEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASIIITKLNLSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVSVSSPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 32 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSMITYGQQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLESAKRVLN
VVCKHCGQKTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETSYTTHIKPVSYKLDGVITYTEIEPKLDGYKKNAYYTEQPIDLVPQTQPLPNA
SFDNFKLTCSNTKFADDLNQMTGFTKPPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGMNLL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVGNVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITTSN
CAKRLAQRVFNMYMPYVFTLLFQLCTFTKSTNSRIRASLPTTIKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLGLSLICVTAAFGVLLSNFGAPSYCNGVRELYL
NSSNVTTMDFCEGSFPCSLCLSGLDLSDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYVHIMDGCTSSCTMMCYKRNRRATRECTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPILLDDQVLVSDVDGSTEVSVKMFDAYVDTF SATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVDTDVDTKDVECLKLSHSDLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVVNVITTKISLKGKIVSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLRAINDFLHFLPRVFSAVGNICYTPSKLIEYSDFA
TSACVLAAECTIFKDAMGKPVPCYDTNLLEGSISYSELRPDTRYVLMDGSI IQFPNT
YLEGSRVVTTFDAEYCRHGTCEERSEVGICLSTSGRWVLNNEHYRALSGVFCGV DAMN

FIGURE 32 (C)

LIANIFTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRVFGEYNHVVAANAL
LFLMSFTILCLVPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLVLAWLYAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLILVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLCLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLNMNVITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLVSSTQEFMYMNSQGLLPPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVSSSKLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSLPS
YAAAYATAQEAYEQAVANGDSEVVLLKKLKKSLNVAKSEFDRDAAMQRKLEKMAHQAMTQ
MYKQARSEDKRAKVTSAMQTMFTMLRKLNDALNNIINNARDGCVPLNIIPLTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYNNNSKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRMV
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFLNGFAV

FIGURE 33 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCGN
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSI FARTLDAANHSI PDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIMAYVTGGLVQQT SQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLQPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEIDETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEEDWLDTTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVIVNAANIHLKHGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVVGPNLNAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEPPNTEDSKTEEKSVVQKPVDV
KPKIKACIDEVTTTTLEETKFLTNKLLL FADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSKKAGGTTEMLSRALKKVPVDEYITTYPGQGCAGYTL EEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASIIITKLNSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVSVPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 33 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSTYGGQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLES AKRVLN
VVCKHCGQKTTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETS YTTTTIKPVSYKLDGVTYTEIEPKLDGYKKDNAYYTEQPIDLVP TQPLPNA
SFDNFKLTC SNTKFADDLNQMTGFTKPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGM DNL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVG NVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITTSN
CAKRLAQRVFNNYMPYVFTLLFQLCTFTKSTNSRIRASLPTTIAKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLSGLICVTAAFGVLLSNFGAPSYCNGVRELYL
NSSNVTTMDFCEGSFPCSI CLSGLDSLDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYVHIMDGCTSSTCMMCYKRNRATRVECTTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPILLLDQALVSDVDGSTEVSVKMFDAYVDTFSATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVDTDVDTKDVIECLKLSHSDLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVVNVITTKISLKGKIVSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLRAINGDFLHFLPRVFSAVGNICYTPSKLIEYS DFA
TSACVLAAECTIFKDAMGKVPYCYDTNLLEGSISYSELRPDTRYVLM DGSIIQFPNT
YLEGSRVVTTFDAEYCRHGT CERSEVGICLSTSGRWVLNNEHYRALSGVFCGV DAMN

FIGURE 33 (C)

LIANIFTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRVFGGEYNHVVAANAL
LFLMSFTILCLVPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFPPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRLKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLAWLYAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLILVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLCLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLMNVITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLSTQEFMYMNSQGLLPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVESSSKLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSLPS
YAAYATAQEAYEQAVANGDSEVVLKCLKKSLNVAKSEFDRDAAMQRKLEKMADQAMTQ
MYQARSEDKRAKVTSAMQTMFTMLRKLNDALNNIINNARDGCVPLNIIPLTTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYYNNKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRMVL
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPAKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFFKRVCGVSAARLTPCGTG
TSTDVVYRAFDIYNEKVAGFAKFLKTNCCRFQEKDEEGNLLDSYFVVKRHTMSNYQHE

FIGURE 33 (D)

ETIYNLVKDCPAVAVHDFFKFRVDGDMVPHISRQRLTKYTMADLVYALRHFDEGNCDT
LKEILVTYNCCDDDYFNKKDWYDFVENPDILRVYANLGERVRQSLLKTVQFCDAMRDA
GIVGVLTLDNQDLNGNWYDFGDFVQVAPGCGVPIVDSYYSLLMPILTTLTRALAAESHM
DADLAKPLIKWDLKDYDFTEERLCLFDRYFKYWDQTYHPNCINCLDDRCILHCANFNV
LFSTVFPPTSFGPLVRKIFVDGVPPFVSTGYHFRELGVVHNQDVNLHSSRLSFKELLV
YAADPAMHAASGNLLLDKRTTCFSVAALTNNVAFQTVKPGNFNKDFYDFAVSKGFFKE
GSSVELKHFFFAQDGNAAISDYDYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCIN
ANQVIVNNLDKSAGFPFNKWGKARLYYDSMSYEDQDALFAYTKRNVIPITITQMNLYA
ISAKNRARTVAGVSI CSTMTRQFHQKLLKSIAATRGATVTVIGTSKFYGGWHNMLKTV
YSDVETPHLMGWDYPKCDRAMPNMLRIMASLVLARKHNTCCNLSHRFYRLANCAQVL
SEMVMCGGSLYVKPGGTSSGDATTAYANSVFNICQAVTANVNALLSTDGINKIADKYVR
NLQHRLYECLYRNRDVEDHEFVDEFYAYLRKHFSMMILSDDAVVCYNSNYAAQGLVASI
KNFKAVLYYQNNVFMSEAKCWTETDLTKGPHEFCSQHTMLVKQGDDYVYLPYPDPSRI
LGAGCFVDDIVKTDGTLMIERFVSLAIDAYPLTKHPNQEYADV FHLYLQYIRKLHDEL
TGHMLDMYSVMLTNDNTSRYWEPEFYEAMYPHTVLQAVGACVLCNSQTSLRGACIR
RPFLCCKCCYDHVISTSHKLVL SVNYPVCNAPGCDVTDVTQLYLGGMSYYCKSHKPPI
SFPLCANGQVFGLYKNTCVGSDNVTDFNAIATCDWTNAGDYILANTCTERLKLFAAET
LKATEETFKL SYGIATVREVLSRELHLSWEVGKPRPPLNRNYVFTGYRVTKNSKVQI
GEYTFEKG DYGDAVVYRGTTTYKLNVDYFVLTSH TVMPLSAPTLVPQEHYVRITGLY
PTLNI SDEFSSNVANYQKVGMQKYSTLQGPPGTGKSHFAIGLALYPSARIVYTACSH
AAVDALCEKALKYLPIDKCSRIIPARARVECFDKFKVNSTLEQYVFCTVNALPETTAD
IVVFDEISMATNYDLSVVNARLRKHYVYIGDPAQLPAPRTLLTKGTLEPEYFNSVCR
LMKTIGPDMFLGTCRRCPAEIVDTV SALVYDNKLKAHKDKSAQCCKMFYKGVITHDVS
SAINRPQIGVVREFLTRNPAWRKAVFISPYN SQNAVASKILGLPTQTV DSSQGSEYDY
VIFTQTTETAHSCNVNRFNVAITRAKIGILCIMS DRDLYDKLQFTSLEIPRRNVATLQ

FIGURE 33 (E)

AENV TGLFKDCSKI ITGLHPTQAPTHLSVDIKFKTEGLCVDIPGIPKDMTYRRLISMM
GFKMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATRDAVG TNLPLQLGFSTGVN
LVAVPTGYVDTENNTEFTRVNAKPPPGDQFKHLIPLMYKGLPWNVVR IKIVQMLSDTL
KGLSDRVV FVLWAHGFELTSMKYFVKIGPERTCCLCDKRATCFSTSSDTYACWNHSVG
FDYVYNPFMIDVQQWGFTGNLQSNHDQHCQVHGNAHVASCDAIMTRCLAVHECFVKRV
DWSVEYPIIGDEL RVNSACRKVQHMVVK SALLADKFPVLHDIGNPKAIKCV PQAEVEW
KFYDAQPCSDKAYKIEELFYSYATHHDKFTDGVCLFWNCNVD RYPANAIVCRFDTRVL
SNLNLPGCDGGS LYVNKHAFHTPAFDKSAFTNLKQLPFFYYS DSPCESHGKQVVS DID
YVPLKSATCITRCNLGGAVCRHHANEYRQYLDAYNMMISAGFSLWIYKQFDTYNLWNT
FTRLQSL ENVAYNVVNKGHFDGHAGEAPVSIINNAVYTKVDGIDVEIFENKTTLPVNV
AFELWAKRNIKPVPEIKILNNLGVDIAANTVIWDYKREAPAHVSTIGVCTMTDIAKKP
TESACSSLTVLFDGRVEGQVDLFRNARNGVLITEGSVKGLTPSKGPAQASVNGVTLIG
ESVKTQFNYFKKVDGIIQQLPÉTYFTQSRDLEDFKPRSQMETDFLELAMDEFIQRYKL
EGYAFEHIVYGDFSHGQLGGLHLMIGLAKRSQDSPLKLEDFIPMDSTVKNYFITDAQT
GSSKCVCSVIDLLLDDFVEI IKSQDLSVISKVVKVTIDYAEISFMLWCKDGHVETFYP
KLQASQAWQPGVAMPNLYKMQRMLLEKCDLQNYGENAVIPKGIMMNVAKYTQLCQYLN
TLTLAVPYNMRVIHFGAGSDKG VAPGTAVLRQWLPTGTLLVDSDLNDFVSDADSTLIG
DCATVHTANKWDLII SDMYDPRTKHVT KENDSKEGFFTYLCGFIKQKLALGGSIAVKI
TEHSWNADLYKLMGHFSWWTAFVTNVNASSSEAF LIGANYLGKPKEQIDGYTMHANYI
FWRNTNPIQLSSYS LFDMSKFPLKLRGTAVMSLKENQINDMIYSLLEKGR LIIRENNR
VVVSSDILVNN

FIGURE 34 (A)

RVCGVSAARLTPCGTGTSTDVVYRAFDIYNEKVAGFAKFLKTNC
CRFQEKDEEGNLLDSYFVVKRHTMSNYQHEETIYNLVKDCPAVAVHDFFKFRVDGDMV
PHISRQRLTKYTMADLVYALRHFDEGNCDTLKEILVTYNCCDDDYFNKKDWYDFVENP
DILRVYANLGERVRQSLKTVQFCDAMRDAGIVGVLTLDNQDLNGNWDYDFGDFVQVAP
GCGVPIVDSYYSLLMPILTLTRALAAESHMDADLAKPLIKWDLKLYDFTEERLCLFDR
YFKYWDQTYHPNCINCLDDRCILHCANFNVLFFSTVFPPTSFGPLVRKIFVDGVFPFVVS
TGYHFRELGVVHNQDVNLHSSRLSFKELLVYAADPAMHAASGNLLLDKRTTCFSVAAL
TNNVAFQTVKPGNFNKFDFYDFAVSKGFFKEGSSVELKHFFFAQDGNAAISDYDYRYN
LPTMCDIRQLLFVVEVDKYFDCYDGGCINANQVI VNNLDKSAGFPFNKWKARLYYD
SMSYEDQDALFAYTKRNVIPTITQMNLYAISAKNRARTVAGVSI CSTMNRQFHQKL
LKSIAATRGATVVI GTSKFYGGWHNMLKTVYSVETPHLMGWDYPKCDRAMPNMLRIM
ASLVLARKHNTCCNL SHRFYRLANCAQVLSEVMCGGSLYVKPGGTSSGDATTAYAN
SVFNICQAVTANVNALLSTDGNKIADKYVRNLQHRLYECLYRNRDVEHFVDEFYAYL
RKHFSSMILSDDAVVCYNSNYAAQGLVASIKNFKAVLYYQNNVFMSEAKCWTETDLTK
GPHEFCSQHTMLVKQGDDYVYLPYPDP SRILGAGCFVDDIVKTDGTLMIERFVSLAID
AYPLTKHPNQEYADV FHLYLQYIRKLHDELTGHMLDMYSVMLTNDNTSRYWEPEFYEA
MYTPHTVLQAVGACVLCNSQTS LRCGACIRRPFLCCKCCYDHVISTSHKLVL SVNPYV
CNAPGCDVTDVTQLYLGGMSYYCKSHKPPISFPLCANGQVFGLYKNTCVGSDNVTDFN
AIATCDWTNAGDYI LANTCTERLKLFAAETLKATEETFKLSYGIATVREVLSDRELHL
SWEVGKPRPPLNRNYVFTGYRVTKNSKVQIGEYTFEKG DYGDAVVYRGTTTYKLNVD
YFVLTSHTVMPLSAPTLVPQEHYVRITGLYPTLNISDEFSSNVANYQKVGMQKYSTLQ
GPPGTGKSHFAIGLALYYPSARIVYTACSHA AVDALCEKALKYLPIDKCSRIIPARAR
VECFDKFKVNSTLEQYVFCTVNALPETTADIVVFDEIS MATNYDLSVVNARLRKHYV
YIGDPAQLPAPRTLTKGTLEPEYFNSVCRLMKTIGPDMFLGTCRRCPAEIVDTV SAL
VYDNKLKAHKDKSAQC FKM FYKGVITHDVSSAINRPQIGVVREFLTRNPAWRKAVFIS
PYN SQNAVASKILGLPTQTVDSSQGSEYDYVIFTQT TETAHSCNVNRFNVAITRAKIG

FIGURE 34 (B)

ILCIMS DRDLYDKLQFTSLEIPRRNVATLQAENV TGLFKDCSKIITGLHPTQAPTHLS
VDIKFKTEGLCVDIPGIPKDMTYRRLISMGMFKMNYQVNGYPNMFITREEAIRHVRW
IGFDVEGCHATRDAVG TNLPLQLGFSTGVNLVAVPTGYVD TENNTEFTRVNAKPPPGD
QFKHLIPLMYKGLPWNVVR IKIVQMLS DTLKGLSDRVV FVLWAHGFELTSMKYFVKIG
PERTCCLCDKRATCFSTSSD TYACWNH SVGFDYVYNPF MIDVQQWGFTGNLQSNHDQH
CQVHGNAHVASCD AIMTRCLAVHECFVKRVDWSVEYPIIGDEL RVNSACRKVQH MVVK
SALLADKFPVLHDIGNPKAIKCV PQAEVEWKFYDAQPCSDKAYKIEELFYSYATHHDK
FTDGVCLFWNCNVDRYPANAIVCRFDTRVLSNLNLPGCDGGS LYVNKHAFHTPAFDKS
AFTNLKQLPFFYYSDSPCESHGKQVVS DIDYVPLKSATCITRCNLGGAVCRHHANEYR
QYLDAYNMMISAGFSLWIYKQFDTYNLWNTFTRLQSL ENVAYNVVNKGHFDGHAGEAP
VSIINNAVYTKVDGIDVEIFENKTTLPVN VAFELWAKRNIKPVPEIKILNNLGVDIAA
NTVIWDYKREAPAHVSTIGVCTMTDIAKKPTESACSSLT VLF DGRVEGQVDLFRNARN
GVLITEGSVKGLTPSKGPAQASVNGVT LIGESVKTQFNYFKKVDGIIQQLPETYFTQS
RDLEDFKPRSQMETDFLELAMDEFIQRYKLEGYAFEHIVYGDFSHGQLGGLHLMIGLA
KRSQDSPLKLED FIPMDSTVKNYFITDAQTGSSKCVCSVIDLLLDDFVEI IKSQDLSV
ISKVVKVTIDYAEISFMLWCKDGHVETFY PKLQASQAWQPGVAMPNLYKMQRMLLEKC
DLQNYGENAVIPKGIMMNVAKYTQLCQYLNTLT LAVPYNMRVIHFGAGSDKG VAPGTA
VLRQWLPTGTLLVDS DLNDFVSDADSTLIGDCATVHTANKWDLII SDMYDPRTKHVTK
ENDSKEGFFTYLCGFIKQKLALGGSIAVKITEHSWNADLYKLMGHFSWWTAFVTNVNA
SSSEAF LIGANYLGKPKEQIDGYTMHANYIFWRNTNPIQLSSYS LFDMSKFPLKLRGT
AVMSLKENQINDMIYSLLEKGRLIIRENNRVVSSDILVNN

FIGURE 35 (A)

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGAVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSYEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHNS
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSFAFIDTIKSLDYKSFKTIVESCGN
YKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQAAGVIRSIFARTLDAANHSIPDLQRAA
VTILDGISEQSLRLVDAMVYTSDLLTNSVIIMAYVTGGLVQQTSQWLSNLLGTTVEKL
RPIFEWIEAKLSAGVEFLKDAWEILKFLITGVFDIVKGQIQVASDNIKDCVKCFIDVV
NKALEMCIDQVTIAGAKLRSLNLGEVFIAQSKGLYRQCIRGKEQLQLLMPLKAPKEVT
FLEGDSHDTVLTSEEVLKNGELEALETPVDSFTNGAIVGTPVCVNGLMLEIKDKEQ
YCALSPGLLATNNVFRCLKGGAPIKGVTFGEDTVWEVQGYKNVRITFELDERVDKVLNE
KCSVYTVESGTEVTEFACVVAEAVVKTLPVSDLLTNMGIDLDEWSVATFYLFDDAGE
ENFSSRMYSFYPPDEEEEDDAECEEEEEIDETCEHEYGTEDDYQGLPLEFGASAETVR
VEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVNQFTGYLKLTDNVAIKCVDIVKEAQSA
NPMVIVNAANIHLKHGGVAGALNKATNGAMQKESDDYIKLNGPLTVGGSCLLSGHNL
AKKCLHVGPNNLAGEDIQLLKAAYENFNSQDILLAPLLSAGIFGAKPLQSLQVCVQT
VRTQVYIAVNDKALYEQVVM DYLDNLKPRVEAPKQEEPPNTEDSKTEEKS SVVQKPVDV
KPKIKACIDEVTTTTLEETKFLTNKLLL FADINGKLYHDSQNMLRGEDMSFLEKDAPYM
VGDVITSGDITCVVIPSKKAGGTTEMLSRALKKVPVDEYITTYPGQGCAGYTL EEAKT
ALKKCKSAFYVLPSEAPNAKEEILGTVSWNLREMLAHAEETRKLMPICMDVRAIMATI
QRKYKGIKIQEGIVDYGVRFFFYTSKEPVASIIITKLNSLNEPLVTMPIGYVTHGFNLE
EAARCMRSLKAPAVVS VSSPDAVTTYNGYLTSSSKTSEEHFVETVSLAGSYRDWSYSG

FIGURE 35 (B)

QRTELGVEFLKRGDKIVYHTLESPVEFHLDGEVLSLDKLSLLSLREVKTIKVFTTVD
NTNLHTQLVDMSTYQQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRSEAFE
YYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFN
APALQEAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHTLLQHANLESAKRVLN
VVCKHCGQKTTTLTGVEAVMYMGTLSDNLKTGVSI PCVCGRDATQYLVQQESSFVMM
SAPPAEYKLQQGTFLCANEYTGNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTD
VFYKETSYTTTTIKPVSYKLDGVITYTEIEPKLDGYKKNAYYTEQPIDLVPQTQPLPNA
SFDNFKLTCSNTKFADDLNQMTGFTKPASRELSVTFFPDLNGDVVAIDYRHYSASFKK
GAKLLHKPIVWHINQATTKTTFKPNTWCLRCLWSTKPVDTSNSFEVLAVEDTQGMNLL
ACESQQPTSEEVVENPTIQKEVIECDVKTTEVVGNVILKPSDEGVKVTQELGHEDLMA
AYVENTSITIKKPNELSLALGLKTIATHGIAAINSVPWSKILAYVKPFLGQAAITTSN
CAKRLAQRVFNMYVFTLLFQLCTFTKSTNSRIRASLPTTIKNSVKSVAKLCLDA
GINYVKSPKFSKLFTIAMWLLLLSICLSGLDSLDSYPALETIQVTISSYKLDLTILGLAAEWVL
NSSNVTTMDFCEGSFPCSI CLSGLDSLDSYPALETIQVTISSYKLDLTILGLAAEWVL
AYMLFTKFFYLLGLSAIMQVFFGYFASHFISNSWLMWFIISIVQMAPVSAMVRMYIFF
ASFYYIWKSYVHIMDGCTSSTCMMCYKRNRATRVECTTIVNGMKRSFYVYANGGRGFC
KTHNWNCLNCDTFCTGSTFISDEVARDLSLQFKRPINPTDQSSYIVDSVAVKNGALHL
YFDKAGQKTYERHPLSHFVNLDNLRANNTKGSLPINVIVFDGKSKCDESASKSASVYY
SQLMCQPI LLLDQALVSDVDGSTEVSVKMFDAYVDTF SATFSVPMEKLKALVATAHSE
LAKGVALDGVLSTFVSAARQGVVDTDVDTKDVI ECLKLSHSDLEVTGDSCNNFMLTY
NKVENMTPRDLGACIDCNARHINAQVAKSHNVSLIWNVKDYMSLSEQLRKQIRSAKK
NNIPFRLTCATTRQVVNVITTKISLKGKIVSTCFKLMLKATLLCVLAALVCYIVMPV
HTLSIHDGYTNEIIGYKAIQDGVTRDIISTDDCFANKHAGFDAWFSQRGGSYKNDKSC
PVVAAIITREIGFIVPGLPGTVLRAIN GDFLHFLPRVFSAVGNICYTPSKLIEYSDF
TSACVLAAECTIFKDAMGKVPYCYDTNLLEGSISYSELRPDTRYVLMDGSI IQFPNT
YLEGSRVVTTFDAEYCRHGTCERSEVGICLSTSGRWVLNNEHYRALSGVFCGVDAMN

FIGURE 35 (C)

LIANI FTPLVQPVGALDVSASVVAGGIIAILVTCAAYYFMKFRRAFGEYNHVVAANAL
LFLMSFTILCLAPAYSFLPGVYSVFYLYLTFYFTNDVSFLAHLQWFAMFSPIVPFWIT
AIYVFCISLKHCHWFFNNYLKRVMFNGVTFSTFEEAALCTFLLNKEMYLKLRSETLL
PLTQYNRYLALYNKYKYFSGALDTSYREAACCHLAKALNDFSNSGADVLYQPPQTSI
TSAVLQSGFRKMAFPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDMLNP
NYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRLKVDTSNPKTPKYKFVRIQPGQ
TFSVLACYNGSPSGVYQCAMPNHTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELP
TGVHAGTDLEGKFYGPVDRQTAQAAGTDTTITLNLVLAWLAAVINGDRWFLNRFTTT
LNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDMCAALKELLQNGMNGRTILGS
TILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTFLTSLLLLVQSTQWSLFFF
VYENAFLPFTLGIMAIAACAMLLVKHKHAFCLCLLPSLATVAYFNMVYMPASWVMRI
MTWLELADTSLSGYRLKDCVMYASALVLLILMTARTVYDDAARRVWTLMNVITLVYKV
YYGNALDQAISMWALVISVTSNYSGVVTTIMFLARAIVFVCVEYYPLLFITGNTLQCI
MLVYCFLGYCCCCYFGLFCLLNRYFRLTLGVYDYLSTQEFYRMYNSQGLLPPKSSIDA
FKLNIKLLGIGGKPCIKVATVQSKMSDVKCTSVVLLSVLQQLRVESSSKLWAQCVQLH
NDILLAKDTTEAFEKMSVLLSVLLSMQGAVDINRLCEEMLDNRATLQAIASEFSSSLPS
YAAAYATAQEAYEQAVANGDSEVVLKCLKKSLNVAKSEFDRDAAMQRKLEKMAQAMTQ
MYKQARSEDKRAKVTSAMQTMFTMLRKLNDALNNIINNARDGCVPLNIIPLTAAK
LMVVVPDYGTYNKTCDGNTFTYASALWEIQQVVDADSKIVQLSEINMDNSPNLAWPLI
VTALRANSVAVKLQNNELSPVALRQMSCAAGTTQTACTDDNALAYNNSKGGRFVLALL
SDHQDLKWARFPKSDGTGTIYTELEPPCRFVTDTPKGPKVKYLYFIKGLNNLNRGMVL
GSLAATVRLQAGNATEVPANSTVLSFCAFAVDPKAYKDYLASGGQPITNCVKMLCTH
TGTGQAITVTPEANMDQESFGGASCCLYCRCHIDHPNPKGFCDLKGKYVQIPTTCAND
PVGFTLRNTVCTVCGMWKGYGCSCDQLREPLMQSADASTFLNRVCGVSAARLTPCGTG
TSTDVVYRAFDIYNEKVAGFAKFLKTNCCRFQEKDEEGNLLDSYFVVKRHTMSNYQHE
ETIYNLVKDCPAVAVHDFFKFRVDGDMVPHISRQRLTKYTMADLVYALRHFDEGNCDT

FIGURE 35 (D)

LKEILVTYNCCDDDYFNKKDWYDFVENPDILRVYANLGERVRQSLLKTVQFCDAMRDA
GIVGVLTLDNQDLNGNWYDFGDFVQVAPGCGVPIVDSYYSLLMPILTTLTRALAAESHM
DADLAKPLIKWDLCLKYDFTEERLCLFDRYFKYWDQTYHPNCINCLDDRCILHCANFNV
LFSTVFPPTSFGPLVRKIFVDGVFPFVSTGYHFRELGVVHNQDVNLHSSRLSFKELLV
YAADPAMHAASGNLLLDKRTTCFSVAALTNNVAFQTVKPGNFNKDFYDFAVSKGFFKE
GSSVELKHFFFAQDGNAAISDYDYRYNLPTMCDIRQLLFVVEVVDKYFDCYDGGCIN
ANQVIVNNLDKSAGFPFNKWGKARLYYDSMSYEDQDALFAYTKRNVIPITITQMNLYA
ISAKNRARTVAGVSICSTMTNRQFHQKLLKSIAATRGATVVIGTSKFYGGWHNMLKTV
YSDVETPHLMGWDYPKCDRAMPNMLRIMASLVLARKHNTCCNLSHRFYRLANECAQVL
SEMVMCGGSLYVKPGGTSSGDATTAYANSVFNICQAVTANVNALLSTDGINKIADKYVR
NLQHRLYECLYRNRDVEHEFVDEFYAYLRKHFSMMILSDDAVVCYNSNYAAQGLVASI
KNFKAVLYYQNNVFMSEAKCWTETDLTKGPHEFCSQHTMLVKQGDDYVYLPYPDPSRI
LGAGCFVDDIVKTDGTLMIERFVSLAIDAYPLTKHPNQEYADVFLYLYQYIRKLHDEL
TGHMLDMYSVMLTNDNTSRYWEPEFYEAMYTPHTVLQAVGACVLCNSQTSLRGACIR
RPFLCCKCCYDHVISTSHKLVLVSNPYVCNAPGCDVTDVTQLYLGGMSYYCKSHKPP
SFPLCANGQVFGLYKNTCVGSDNVTDFNAIATCDWTNAGDYILANTCTERLKLFAAET
LKATEETFKLKSYGIATVREVLSDRELHLSWEVGKPRPPLNRNYVFTGYRVTKNSKVQI
GEYTFEKGDYGDVAVYRGTTTYKLVNGDYFVLTSHTVMPLSAPTLVPQEHYVRITGLY
PTLNISDEFSSNVANYQKVGMQKYSTLQGPPTGKSHFAIGLALYPSARIVYTACSH
AAVDALCEKALKYLPIDKCSRIIPARARVECFDKFKVNSTLEQYVFCTVNALPETTAD
IVVFDEISMATNYDLSVVNARLRKHYVYIGDPAQLPAPRTLLTKGTLEPEYFNSVCR
LMKTIGPDMFLGTCRRCPAEIVDTVSAVLDNKLKAHKEKSAQCFKMFYKGVITHDVS
SAINRPQIGVVREFLTRNPAWRKAVFISPYN SQNAVASKILGLPTQTVDSSQGSEYDY
VIFTQTTEHAHSCNVNRFNVAITRAKIGILCIMS DRDLYDKLQFTSLEIPRRNVATLQ
AENV TGLFKDCSKIITGLHPTQAPTHLSVDIKFKTEGLCVDIPGIPKDMTYRRLISMM
GFKMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATRDAVG TNLPLQLGFSTGVN

FIGURE 35 (E)

LVAVPTGYVDTENNTEFTRVNAKPPPGDQFKHLIPLMYKGLPWNVVRICKIVQMLSDTL
KGLSDRVVFWLWAHGFELTSMKYFVKIGPERTCCLCDKRATCFSTSSDTYACWNHSVG
FDYVYNPFMIDVQQWGFTGNLQSNHDQHCQVHGNAHVASCDAIMTRCLAVHECFVKRV
DWSVEYPIIGDELRVNSACRKVQHMVVKSAALLADKFPVLHDIGNPKAIKCVPQAEVEW
KFYDAQPCSDKAYKIEELFYSYATHHDKFTDGVCLFWNCNVDRYPANAIIVCRFDTRVL
SNLNLPGCDGGSLYVNKHAFHTPAFDKSAFTNLKQLPFFYYSDSPCESHGKQVVSDID
YVPLKSATCITRCNLGGAVCRHHANEYRQYLDAYNMMISAGFSLWIYKQFDTYNLWNT
FTRLQSLENVAYNVVNKGHFDGHAGEAPVSIINNAVYTKVDGIDVEIFENKTTLPVNV
AFELWAKRNIKPVPEIKILNNLGVDAANTVIWDYKREAPAHVSTIGVCTMTDIAKKP
TESACSSLTVLFDGRVEGQVDLFRNARNGVLITEGSVKGLTPSKGPAQASVNGVTLIG
ESVKTQFNYFKKVDGIIQQLPETYFTQSRDLEDFKPRSQMETDFLELAMDEFIQRYKL
EGYAFEHIVYGDFSHGQLGGLHLMIGLAKRSQDSPLKLEDFIPMDSTVKNYFITDAQT
GSSKCVCSVIDLLLDDFVEIISQDLSVISKVVKVTIDYAEISFMLWCKDGHVETFYP
KLQASQAWQPGVAMPNLYKMQRMLLEKCDLQNYGENAVIPKGIMMNVAKYTQLCQYLN
TLTLAVPYNMRVIHFGAGSDKGVA PGTA VLRQWLPTGTLLVDSDLNDFVSDADSTLIG
DCATVHTANKWDLIIISDMYDPRTKHVTKENDSKEGFFTYLCGFIKQKLALGGSIAVKI
TEHSWNADLYKLMGHFSWWTAFVTNVNASSSEAFBIGANYLGKPKEQIDGYTMHANYI
FWRNTNPIQLSSYSLFDMSKFPLKLRGTAVMSLKENQINDMIYSLLEKGRLLIRENNR
VVVSSDILVNN

FIGURE 36

KSFKTIVESC GNYKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQA
AGVIRSIFARTLDAANHSIPDLQRAAVTILDGISEQSLRLVDAMVYTSDLLTNSVIIM
AYVTGGLVQQTSQWLSNLLGTTVEKLRPIFEWIEAKLSAGVEFLKDAWEILKFLITGV
FDIVKGQIQVASDNIKDCVKCFIDVFNKALEMCIDQVTIAGAKLRSLNLGEVFIAQSK
GLYRQCIRGKEQLQLLMPLKAPKEVTFLEGDSHDTVLTSEEVLKNGELEALETPVDS
FTNGAIVGTPVCVNGLMLEIKDKEQYCALSPGLLATNNVFRLLKGGAPIKGVTFGEDT
VWEVQGYKNVRITFELDERVDKVLNEKCSVYTVESGTEVTEFACVVAEAVVKTLQPVS
DLLTNMGIDLDEWSVATFYLFDDAGEENFSSRMYCSFYPPDEEEEDDAECEEEEEIDET
CEHEYGTEDDYQGLPLEFGASAETVRVEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVN
QFTGYLKLTDNVAIKCVDTVKEAQSANPMVIVNAANIHLKHGGGVAGALNKATNGAMQ
KESDDYIKLNGPLTVGGSCLLSGHNLAKKCLHVVGPNLNAGEDIQLLKAAYENFNSQD
ILLAPLLSAGIFGAKPLQSLQVCVQTVRTQVYIAVNDKALYEQVVM DYLDNLKPRVEA
PKQEEPPNTEDSKTEEKSVVQKPV DVKPKIKACIDEVTTTLEETKFLTNKLLLFADIN
GKLYHDSQNMLRGEDMSFLEEDAPYMGDVITSGDITCVVIPSKKAGGTTEMLSRALK
KVPVDEYITTPGQGCAGYTL EEAKTALKKCKSAFYVLPSEAPNAKEEILGT VSWNLR
EMLAHAE EARKLMPICMDVRAIMATIQRKYKG VKIQEGIVDYGV RFFFYTSKEPVASI
ITKLNSLNEPLVTMPIGYVTHGFNLEEAARCMRSLKAPAVSVSSPDAVTTYNGYLTS
SSKTSEEHFVETVSLAGSYRDWSYSGQRTELGV EFLKRGDKIVYHTLES PVEFHLDGE
VLSLDKLSLLSLREVKTIKVFTTVDNTNLHTQLVDMSMTYGQQFGPTYLDGADVTKI
KPHVNHEGKTFFVLPSDDTLRSEAF EYYHTLDESFLGRYMSALNHTKKWKFPQVGGLT
SIKWADNNCYLSSVLLALQQLEVKFNAPALQE

FIGURE 37

KSFKTIVESC GNYKVTKGKPVKGAWNIGQQRSVLTPLCGFPSQA
AGVIRSIFARTLDAANHSIPDLQRAAVTILDGISEQSLRLVDAMVYTSDLLTNSVIIM
AYVTGGLVQQTSQWLSNLLGTTVEKLRPIFEWIEAKLSAGVEFLKDAWEILKFLITGV
FDIVKGQIQVASDNIKDCVKCFIDVFNKALEMCIDQVTIAGAKLRSLNLGEVFIAQSK
GLYRQCIRGKEQLQLLMPLKAPKEVTFLEGDSHDTVLTSEEVLKNGELEALETPVDS
FTNGAIVGTPVCVNGLMLLEIKDKEQYCALSPGLLATNNVFRLLKGGAPIKGVTFGEDT
VWEVQGYKNVRITFELDERVDKVLNEKCSVYTVESGTEVTEFACVVAEAVVKTLQPVS
DLLTNMGIDLDEWSVATFYLFDDAGEENFSSRMYCSFYPPDEEEEDDAECEEEEIDET
CEHEYGTEDDYQGLPLEFGASAETVRVEEEEEEDWLDDTTEQSEIEPEPEPTPEEPVN
QFTGYLKLTDNVAIKCVDTVKEAQSANPMVIVNAANIHLKHGGGVAGALNKATNGAMQ
KESDDYIKLNGPLTVGGSCLLSGHNLAKKCLHVVGPNLNAGEDIQLLKAAYENFNSQD
ILLAPLLSAGIFGAKPLQSLQVCVQTVRTQVYIAVNDKALYEQVMDYLDNLKPRVEA
PKQEEPNTEDSKTEEKSVVQKPVDPKPKIKACIDEVTTTLEETKFLTNKLLLFADIN
GKLYHDSQNMLRGEDMSFLEEDAPYMGDVITSGDITCVVIPSCKAGGTTEMLSRALK
KVPVDEYITTPGQGCAGYTLLEAKTALKKCKSAFYVLPSEAPNAKEEILGTVSWNLR
EMLAHAE EARKLMPICMDVRAIMATIQRKYKGVKIQEGIVDYGVRRFFFYTSKEPVASI
ITKLNSLNEPLVTMPIGYVTHGFNLEEAARCMRSLKAPAVSVSSPDAVTTYNGYLTS
SSKTSEEHFVETVSLAGSYRDWSYSGQRTLGVEFLKRGDKIVYHTLES PVEFHLDGE
VLSLDKLSLLSLREVKTIKVFTTVDNTNLHTQLVDMSMTYGQQFGPTYLDGADVTKI
KPHVNHEGKTFFVLPSDDTLRSEAFEYYHTLDESFLGRYMSALNHTKKWKFPQVGGLT
SIKWADNNCYLSSVLLALQQLEVKNAPALQE

FIGURE 38

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSYDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGVVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSCEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERNINIVGDFHLNEEVAILASFSASTSAFIDTIKSLDYKSFKTIVESC

FIGURE 39

MESLVLGVNEKTHVQLSLPVLQVRDVLVRGFGDSVEEALSEARE
HLKNGTCGLVELEKGVLPQLEQPYVFIKRSDALSTNHGHKVVELVAEMDGIQYGRSGI
TLGVLVPHVGETPIAYRNVLLRKNGNKGAGGHSYGIDLKSVDLGDELGTDPIEDYEQN
WNTKHGSGALRELTRELNGGVVTRYVDNNFCGPDGYPLDCIKDFLARAGKSMCTLSEQ
LDYIESKRGVYCCRDHEHEIAWFTERSDKSCEHQTPFEIKSAKKFDTFKGECPKFVFP
LNSKVKVIQPRVEKKKTEGFMGRIRSVYPVASPQECNNMHLSTLMKCNHCDEVSWQTC
DFLKATCEHCGTENLVIEGPTTCGYLPTNAVVKMPCPACQDPEIGPEHSVADYHNHNSN
IETRLRKGGRTRCFGGCVFAYVGCYNKRAYWVPRASADIGSGHTGITGDNVETLNEDL
LEILSRERVNINIVGDFHLNEEVAILASFSASTSAFIDTIKSLDYKSFKTIVESCGL

FIGURE 40

MSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARPKQRRPQ
GLPNNTASWFTALTQHGKEELRFPRGQGVPIINTNSGPDDQIGYYRRATRVRGGDGKM
KELSPRWYFYLLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGTRNPNNNAATVL
QLPQGTTLPGFYAEGSRGGSQASSRSSSRSGNSRNSTPGSSRGNSPARMASGGGET
ALALLLLDRLNQLESKVSGKGQQQQGQTVTKKSAAEASKKPRQKRTATKQYNVTQAFG
RRGPEQTQGNFGDQDLIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTY
HGAIKLDDKDPQFKDNVILLNKHIDAYKTFPPTPEPKDKKKKTDEAQPLPQRQKKQPT
VTLLPAADMDDFSRQLQNSMSGASADSTQA

FIGURE 41

MFIFLLFLTLTSGSDLDRCTTFDDVQAPNYTQHTSSMRGVYYPD
EIFRSDTLYLTQDLFLPFYSNVTGFHTINHTFDNPVIPFKDGIYFAATEKSNVVRGWV
FGSTMNNKSQSVIIINNSTNVVIRACNFELCDNPFFAVSKPMGTQHTMIFDNAFNCT
FEYISDAFSLDVSEKSGNFKHLREFVFKNKDGFLYVYKGYQPIDVVRDLPSGFNTLKP
IFKLPLGINITNFRAILTAFSPAQDTWGTSAAYFVGYLKPTTFMLKYDENGITIDAV
DCSQNPLAELKCSVKSFEDKGIYQTSNFRVVPSPGDVVRFPNITNLCPFGEVFNATKF
PSVYAWERKKISNCVADYSVLYNSTFFSTFKCYGVSATKLNLCFSNVYADSFVVKGD
DVRQIAPGQTGVIADYNYKLPDDFMGCVLAWNTRNIDATSTGNYNKYRYLRHGKLRP
FERDISNVFPSPDGKPCPPALNCYWPLNDYGFTTTGIGYQPYRVVLSFELLNAPA
TVCGPKLSTDLIKQCVNFNFNGLTGTGVLTTPSSKRFQPFQQFGRDVSDFTDSVRDPK
TSEILDISPSCSFGGVSVITPGTNASSEVAVLYQDVNCTDVSTAIHADQLTPAWRIYST
GNNVFQTQAGCLIGAHEVDTSYECDIPIGAGICASYHTVSLLRSTSQKSIVAYTMSLG
ADSSIAYSNNTIAIPTNFSISITTEVMPVSMAKTSVDCNMYICGDSTECANLLLQYGS
FCTQLNRALSGIAAEQDRNTREVFAQVKQMYKTPTLKYFGGFNFSQILPDPLKPTKRS
FIEDLLFNKVTLADAGFMKQYGECLGDINARDLICAQKFNGLTVLPPLLTDDMIAAYT
AALVSGTATAGWTFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKQIANQFNKAIS
QIQESLTTTSTALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRLDKVEAE
VQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYH
LMSFPQAAPHGVVFLHVTYVPSQERNFTTAPAI CHEGKAYFPREGVVFVNGTSWFITQ
RNFFSPQIIITDNTFVSGNCDVVIGIINNTVYDPLQPELDSFKEELDKYFKNHTSPDV
DLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYVWLGFIGA
GLIAIVMVTILLCCMTSCCSCLKGACSCGSCCKFDEDDSEPVLKGVKLHYT